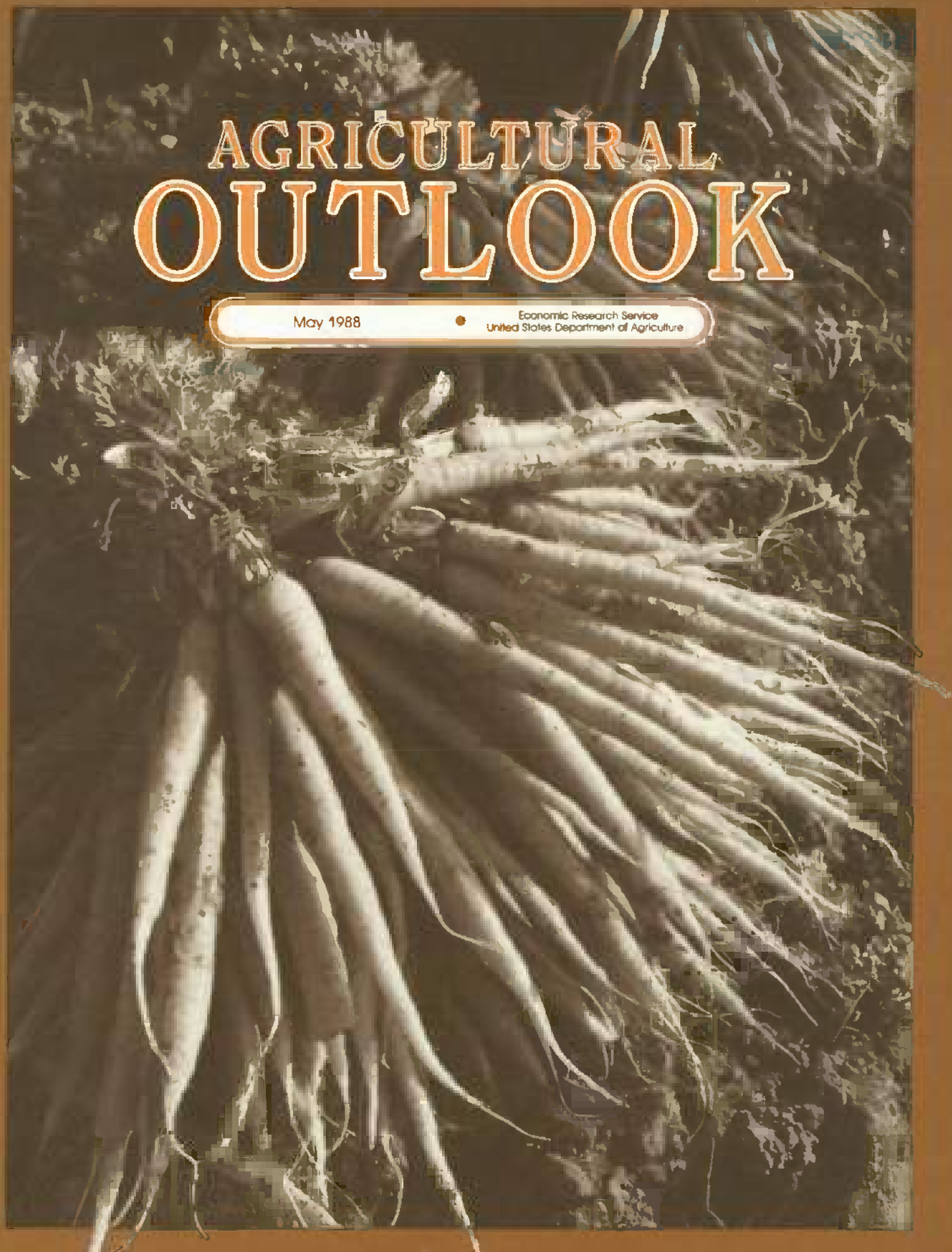

AGRICULTURAL OUTLOOK

May 1988

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In Brief . . . News of Farmland Values, Exports, Bank Failures

Farmland values are stronger in 1988 because of record farm income in 1987 and the subsiding of farm financial difficulties of the early 1980's. After going down for 6 years, farmland values averaged $564 per acre early this year, up 3 percent from last year. However, this average is still 31 percent below the record for nominal value, $823 in 1982. With inflation running at about 4 percent, the real value for 1988 is down 1 percent from 1987.

Prices received by farmers in 1988 will average about the same as last year, with higher crop prices about offsetting lower livestock prices. Cash receipts will be a little higher than last year's $134 billion as crop increases more than offset livestock reductions. With expenses rising from last year's relative low, net cash income is forecast at $50-$55 billion, down slightly from last year's $57 billion.

Crop prices are showing strength from smaller projected plantings, lower grain stocks, and increasing exports of bulk commodities. Wheat stocks on March 1 were down 15 percent from a year earlier to 1.9 billion bushels, and they could fall to 1.2 billion bushels by June 1. Corn stocks on March 1 were down 7 percent from a year earlier to 7.6 billion bushels.

Prospective plantings of major spring field crops indicate a small acreage reduction from last year. This is in contrast to relatively sharp declines in the past 2 years. Higher prices, lower acreage reduction requirements for cotton and rice, reduced paid land diversion payments, and possibly lower program participation rates are encouraging planting and are partially offsetting the continued entry of acreage into the long-term Conservation Reserve Program.

Livestock prices, especially hogs, are under pressure from increased supplies of red meat and poultry. Hog producers continue to expand output at a modest pace and hog inventories are up. Broiler

output may climb 5 percent this year and turkey 10. However, beef production is expected to decline about 4 percent. Even though the combination of lower producer prices and rising feed costs is eroding livestock returns from the relatively high levels of 1986 and 1987, cow-calf operators will probably have one of their more profitable years as calf and yearling prices remain high.

Sizable storage stocks of apples and pears and larger remaining supplies of fresh oranges and grapefruit will likely push grower prices for all fruit below year-earlier levels this spring.

U.S. agricultural exports in fiscal 1988 are forecast at $32.5 billion and 142.5 million metric tons. This is a 16-percent rise in value and 10-percent rise in volume from last season.

Most of the export volume gains this year are coming from bulk rather than high-value products. Wheat exports during 1987/88 are up more than 50 percent from last year's depressed total, to the largest since 1981/82. Corn exports are up about 10 percent, but world corn trade will continue marginally below last year's depressed level. Despite record world oilseed production, U.S. soybean exports may grow about 4 percent.

The role of export programs has not diminished even though lower loan rates and a less expensive dollar have made U.S. commodity prices more competitive. Other exporters have continued subsidies, importers maintain trade barriers, and the dollar has not depreciated significantly in some important U.S. export markets. Many markets face tight foreign exchange constraints or high food aid needs. The United States operates a spectrum of export programs, discussed in this issue, to assist U.S. agricultural exports.

Soviet grain production in 1987 totaled 211 million tons, about 1 percent above a year earlier. This marks the first time that two consecutive crops of over 200 million tons have been harvested. Area was down, but yields moved back up near trend.

Total Soviet grain imports in 1987/88 (July-June) are likely to be the highest in 3 years despite the size of the crop this year and last. The gain is primarily from larger wheat purchases. Aided by the Export Enhancement Program and Soviet demand for milling-quality wheat, the U.S. share of Soviet import volume is likely to rise to about half this year, up from less than 1 percent in 1985/86.

About as many banks are likely to fail this year as last, but less of the stress is coming from agriculture. In 1985, 60 percent of the banks that failed were agricultural. In 1987 this was down to 45 percent. While agricultural banks have begun to fare somewhat better in response to an improved agricultural economy, the failure rate soared last year for banks tied to the energy sector.

Agricultural Economy

Farmers use forecasts of local and national market prices and weather conditions to help plan for the future. Over the years, they have developed experience in coping with forecasts they assumed to be true but were not, and they have used formal insurance and informal strategies to hedge against known risks.

But farmers have little defense against uncertain events, either domestic or foreign, that are due to government actions or major variations in world weather patterns. This was demonstrated during the agricultural boom of the 1970's and the bust of the 1980's.

Economic forecasts, such as those in *Agricultural Outlook*, sometimes are clouded by factors which no one can foresee, or factors over which the relevant decisionmaker has no control.

Who could have foretold the devastatingly late and poor monsoon in Asia and its effect on the 1987 crop and on world prices? What farmer could have said in the early 1980's, "I choose to farm in an economy with a larger money supply and therefore with lower interest rates"? Because of the unpredictability of major events that affect the national and international agricultural economies, it is getting harder to know how to use economic forecasts.

In the past, people would often take forecasts at face value and simply act as if they would be borne out by events. For example, the price of hogs is forecast to be near $50 this summer and then drop to the low $40's this fall.

One could simply accept that forecast and act on it. This is what farmers do, appropriately, when dealing with forecasts about events and processes with which they are familiar, such as the likely responses of corn yields to fertilizer applications, or milk yields to feeding rates.

Some forecasts are ranged—giving a set of possible outcomes so that the user recognizes the uncertainty attached to the forecast. For instance, net cash farm income is forecast in a range of $50-55 billion this year.

A farm equipment manufacturer for whom this forecast is important might determine the consequences if the actual outcome is at one end of the range or the other, and then attach a degree of confidence to each of the two outcomes. Using this information, a manager can work out the best position to take. This is one way to allow for known risks.

Another is for producers to plan their marketing strategy around established price cycles. They can engage in formal insurance, such as crop insurance, or informal insurance, such as hedging their position in hogs in the futures market to help protect themselves from an unexpected price shift. Other strategies for informal insurance include diversified enterprise combinations and maintaining cash or credit reserves for the proverbial rainy day.

But it gets harder to make decisions when producers are increasingly faced by uncertainty caused by events that they can neither predict nor control. Greater exposure to these uncertainties has come along with U.S. farmers' increasing dependence on world markets. Two major sources of risk that affect U.S. farmers are climatic events in other hemispheres and the policies and actions of governments.

Wheat yields in the USSR are more volatile than in the United States—mainly because of differences in geography and the consequent weather patterns. If neither country relied on world markets for imports or exports of wheat, the weather in Russia, and how the USSR responds to it, would not make a difference to the U.S. wheat farmer. However, both countries are active in world markets, and weather in Russia does make a difference to farmers in the United States.

United States and Soviet government policy changes can exacerbate the effect that Russian weather patterns have on U.S. wheat producers. There was a time when the USSR tended to tighten its collective belt after a short crop. Now the Soviets are more likely to seek imports to stabilize their livestock economy—with larger needs in some years and smaller needs in others.

A major exporter like the United States is then faced with volatile export markets and price fluctuations such as those experienced since the early 1970's and the first major "Russian grain deal." U.S. farm programs were more concerned with price and income support for farmers than with stabilization of world markets. The USSR sought improved diets and the United States sought markets for surplus grain. But U.S. farmers were left with more volatile markets.

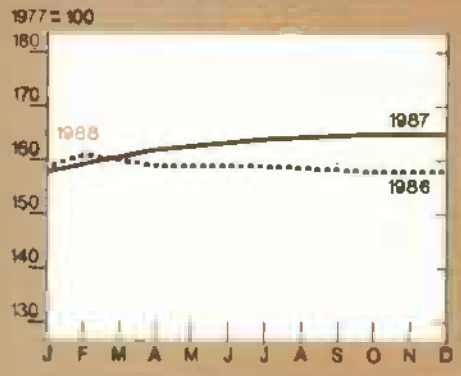
The U.S. Government is examining what more can be done to provide producers with means to manage potentially devastating risks.

The Export Enhancement Program (EEP) and the Targeted Export Assistance Program (TEA) indirectly protect farmers from adverse effects of foreign government policies, as the Export Credit Guarantee Program assists U.S. agricultural exporters.

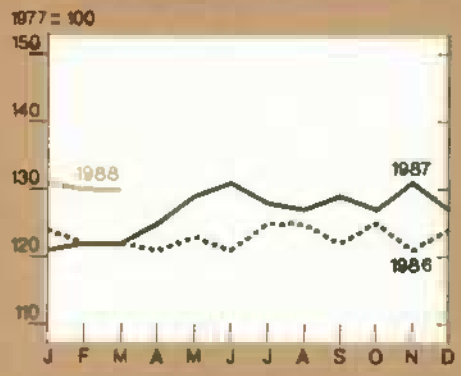
Provisions for reserve stocks of grain help stabilize prices, but do so best when price supports are high relative to free market prices; then there is little upside fluctuation and the programs limit downside fluctuations. Under programs with loan rates close to free market prices, price fluctuations are greater.

Prime Indicators of the U.S. Agricultural Economy

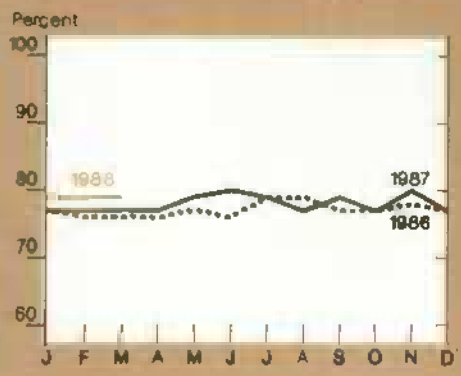
Index of prices paid by farmers[1]



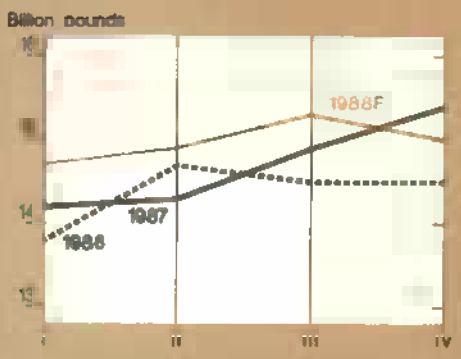
Index of prices received by farmers[2]



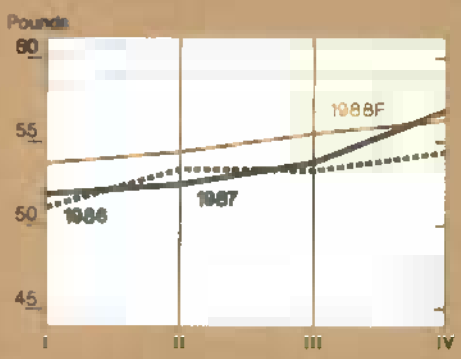
Ratio of prices received to prices paid



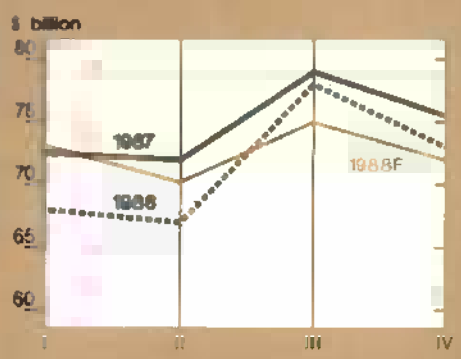
Red meat & poultry[3] production



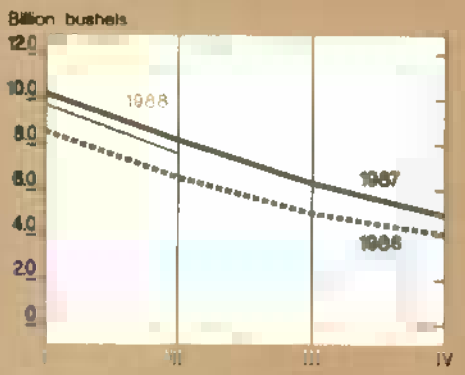
Red meat & poultry consumption, per capita[3,4]



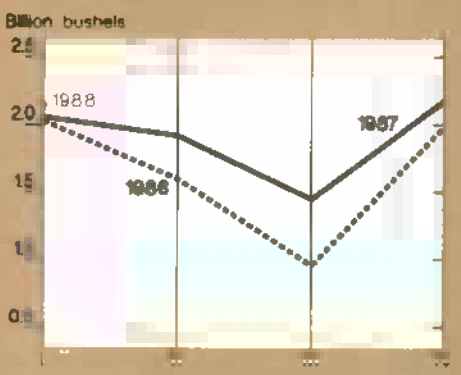
Cash receipts from livestock & products[5]



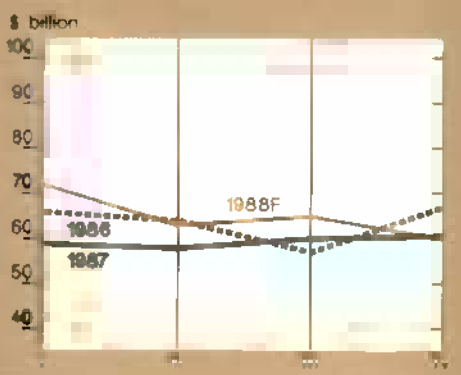
Corn beginning stocks[6]



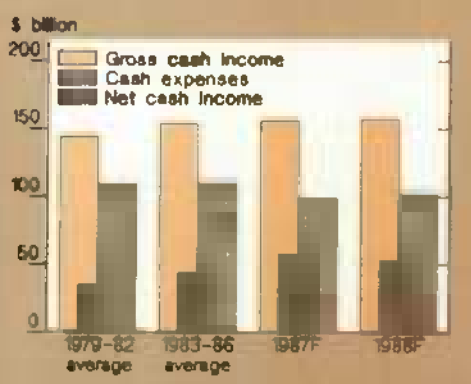
Corn disappearance[6]



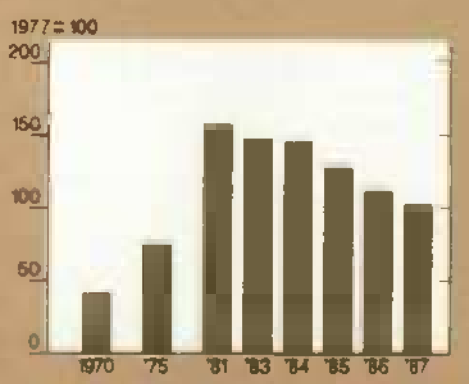
Cash receipts from crops[6]



Farm net cash income



Farm real estate values



Farm value/retail food costs

[1]For commodities and services, interest, taxes and wages. Beginning in 1986, data are only available quarterly. [2]For all farm products. [3]Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. [4]Retail weight. [5]Seasonally adjusted annual rate. I=Dec.-Feb.; II=Mar.-May; III=June-Aug.; IV=Sept.-Nov.; F=forecast

The Food Security Act of 1985 mandated a program for educating farmers in the use of agricultural commodity futures and option markets. Such programs rely on private rather than public actions to deal with price volatility. Still, farmers' plans based on forecasts can receive as great a shock from, say, the weather affecting the soybean crop in South America this May and June as from the weather on their own farm. *[Clark Edwards (202) 786-3313]*

LIVESTOCK OVERVIEW

Prices received for livestock products in 1988, especially hogs, will average a little below last year, as supplies of red meat and poultry increase from a year earlier. Cash receipts from livestock marketings likely will be slightly below last year's $74 billion.

After relatively high net returns in 1986 and 1987, pork and poultry production is expanding 5-6 percent. However, the combination of lower producer prices and rising feed costs is eroding returns. Producers' returns could average near breakeven, unless feed costs rise more than now seems likely.

Beef production is expected to decline about 4 percent, but cow-calf operators will probably have one of their more profitable years as calf and yearling prices remain high. Higher returns will induce a modest increase in heifer retention, likely leading to a stabilization of cattle numbers during 1989.

Fewer Cattle Slaughtered, But at Heavier Weights

Fed cattle traded in the low to middle $70 range per cwt during March, in response to tighter supplies of fed cattle and reduced nonfed cattle slaughter. Steer and heifer slaughter averaged below 520,000 head per week during March, the lowest since December 1985. Winter storms in the major cattle feeding areas of the High Plains slowed rates of gain and pushed back marketing dates.

Larger fed cattle marketings had been expected to reduce feedlot inventories. Instead, more fed cattle will be pushed into the spring quarter, when counterseasonal higher slaughter will pressure cattle prices and reduce fed cattle profits. Producers require fed cattle prices near $70 per cwt through the spring quarter to break even.

Commercial cow and bull slaughter has been running 7 percent lower this year. First-quarter cow slaughter totaled 1.5 million head, the lowest since the spring quarter of 1980.

While nonfed slaughter is down, cattle weights have stayed relatively high. Dressed carcass weights for steers and heifers remain above the average of the past several years. Cow weights during March averaged 12 pounds above a year earlier, and were down only slightly from those reported in February. February represented a 16-pound year-over-year increase.

The increase in bull weights is even larger, with the first-quarter average nearly 40 pounds higher than a year earlier, at 845 pounds dressed weight. Much of the increase may be attributed to greater winter feeding on relatively cheap and abundant forage.

Higher farm prices have not been entirely absorbed by higher prices at retail. Retail beef prices rose 1 percent to $2.46 per pound in February, from $2.43 in January. Fed steers in Omaha advanced nearly 5 percent, or $3 per cwt. The carcass-retail spread was unchanged.

Thus, the live animal price rise resulted in a narrowing of the farm-carcass spread, to the smallest since 1970. Higher byproduct credits helped absorb some of the cattle price increase; however, the narrower spread and the reduced supply of market-ready cattle resulted in a shorter work week in several slaughter plants.

Boxed beef movement to retail outlets and hotels, restaurants, and institutions has been sluggish lately, suggesting that any increase in utilization of slaughter capacity might be met by weaker prices for live cattle. In spite of the prospects for some weakness during May, cattle prices still are likely to average near $70 this spring, as nonfed slaughter remains sharply below 1983-87.

Beyond the spring, there remains some question about where the cattle sector is headed. Supplies of competing meats are expected to increase 8 to 10 percent above a year earlier from this spring through the fall, with cold storage stocks already building to near seasonal highs.

Much of this meat will move out of storage during the summer quarter, when breakeven prices for fed cattle will reach the $72-$74 range, nearly $10 per cwt above the selling price for cattle last summer. Seasonally higher cattle slaughter and larger supplies of pork and poultry are not likely to support fed cattle prices in this range.

Pork Supplies Increase, Retail Prices Below Last Year

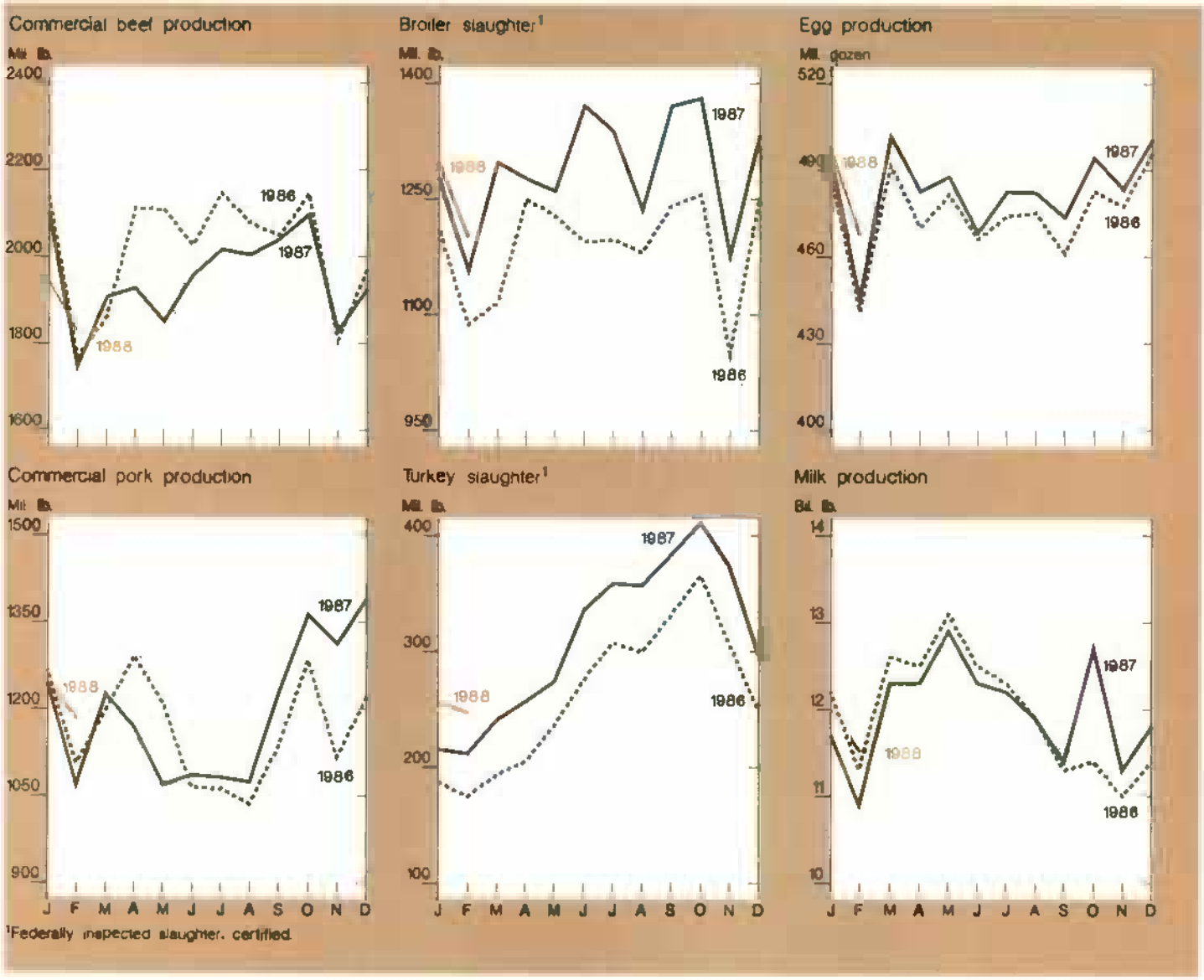
Pork producers continue to expand output at a modest pace. The hog inventory in the 10 quarterly reporting States on March 1 was 40.5 million head, 6 percent higher than a year earlier. Hogs kept for breeding were up 4 percent to 5.42 million. The market hog inventory, at 35.08 million, was up 6 percent.

Last winter's 10-State pig crop (December 1987 through February 1988) was 6 percent larger than the previous year, at 15.77 million head. However, the pig crop was somewhat smaller than it would have been with the 10-percent increase that producers had indicated in farrowing intentions on December 1. As of March 1, farrowing intentions for March-May were 2 percent higher than a year ago, unchanged from intentions reported in December. Farrowing intentions for June-August 1988 were also up 2 percent.

Consistent with the increase in hog inventories and farrowing intentions, pork production is likely to continue above a year earlier at least through the summer, with the greatest year-over-year increases in July and August. Second and third-quarter production may be up about 10 and 8 percent, respectively, while fourth-quarter production may be nearly unchanged from fourth-quarter 1987.

Imports are contributing to the expansion in pork supplies. For the year, net imports are expected to be around 1.18 billion pounds, up from 1.068 billion in 1987.

Stocks of pork in cold storage are substantially greater than last year's depressed level, and they have increased rapidly. By the end of the second



quarter, they could exceed last year by nearly 100 million pounds.

Despite the increase in pork supplies, prospects are for a fairly strong price structure through midyear. Demand for cookout items—primarily pork chops and pork steak, which are cut from pork loins and butts—should be brisk, in view of the tight supply of competing beef cuts.

Market hog inventories suggest that hog slaughter may be relatively light in May and June, reducing fresh pork supplies and supporting wholesale pork prices. Barrow and gilt prices, which averaged $45 per cwt at the seven major markets during the first quarter, are likely to reach the low $50's in June. Second-quarter prices are expected to average $45 to $49.

Because of a potentially sharp increase in pork production between June and September, hog prices could slide into the low $40's per cwt before the end of the third quarter. If they do, cash receipts could slip below cash expenditures and replacement costs. Fourth-quarter feeding margins may average slightly above breakeven, though, as hog prices stabilize in the low $40's per cwt and feed prices decline seasonally.

Retail pork prices in January and February averaged $1.84 per pound, down 3 cents from a year earlier. The farm-to-retail spread was 1 cent wider, at $1.11 per pound, with the farm value down 4 cents to $.73 per pound.

For all of 1988, retail pork prices are expected to average 1 to 4 percent below 1987's $1.89 per pound. The rise in the farm-to-retail spread is likely to be 3 to 7 percent. In 1987, the spread rose 10 percent over 1986.

Second-Quarter Broiler Output May Climb 7 Percent

Broiler prices showed unexpected strength in March, rising to 48-49 cents

per pound, from 44 in February. The price strength in March may be related to tighter beef supplies.

Monthly hatch data for November 1987 through January 1988 indicate first-quarter production may have been 7 percent larger than a year earlier. Average slaughter weights during fourth-quarter 1987 were a little more than 1 percent above the same period in 1986, continuing a trend toward higher weights.

The February hatch plus March weekly chick placements indicate that production in the second quarter may approach 7 percent above a year ago. The February hatching egg flock, which is predominantly broiler-egg layers, was 6 percent larger than a year earlier.

An indicator of December slaughter is the estimated September broiler hatchery supply flock, which is calculated by adding placements 7-14 months earlier. These numbers suggest that broiler production in December 1988 will be about the same as in 1987. Broiler production during 1988 is forecast to increase 5 percent from 1977.

The 12-city wholesale composite price for broilers was 45 cents per pound in first-quarter 1988, down from 50 cents a year before. Prices in the second quarter may average in the 45-49 cent range. Prices should hold through most of the third quarter because of higher summer demand. The average price for 1988 is expected to be around 46 cents, down from 47 a year ago.

U.S. broiler exports in January 1988 reached 57 million pounds, a record for January. As usual, Japan was the major buyer, taking 13 million pounds. Iraq and Egypt each took over 7 million pounds under the Export Enhancement Program, but since January both countries have indefinitely stopped further imports of poultry meat. For more on broiler exports see the commodity spotlight entitled "U.S. Broiler Exports Set Record in 1987."

Turkey Production and Exports Are Up

Turkey production during 1988 is expected to be 10 percent greater than during 1987. But the rate of increase is slowing; gains in poult placements over a year earlier have been at or below 6 percent for 2 months, and eggs in incubators on March 1 were only 4 percent above a year earlier.

Cumulative placements for 1988 slaughter were 11 percent above a year earlier, with half of the yearly placements reported. Poults placed for slaughter in first-quarter 1988 were 17 percent ahead of a year earlier. Second-quarter production is forecast to be 12 percent above a year ago.

Turkey stocks on March 1, at 336 million pounds, were 58 percent greater than a year earlier. The higher stocks and increased production put downward pressure on prices.

Wholesale prices for Eastern region hen turkeys during first-quarter 1988 averaged 49 cents per pound, down from 58 cents in 1987. Prices did not show their usual strength before Easter. They are expected to rise seasonally toward the breakeven level of 60 cents during the third and fourth quarters, although ample supplies of chicken and pork will buffer the rise.

U.S. turkey exports have strengthened since September 1987, turning in the highest monthly totals since the early 1980's. Exports in November and December 1987 were 5 million pounds each and in January 1988, 4.4 million pounds. Average export unit values have been dropping, though, from 48 cents per pound in November to 35 cents in January.

Leading importers continue to be West Germany, Taiwan, Egypt, Canada, Japan, and Hong Kong. U.S. turkey exports to Taiwan are up from 38,000 pounds in 1986 to 3 million in 1987. In January 1988, exports to Taiwan were nearly 1 million pounds, about the same as in December.

In late 1986, Taiwanese chicken prices were high following two typhoons that reduced feed supplies; imports from the United States began that December. However, as domestic poultry prices fell in Taiwan, its agricultural organizations pressured the Government to curtail further poultry imports. In March 1988, 3,000 Taiwanese farmers demonstrated against imports of U.S. turkeys and chicken, blaming them for domestic chicken prices' falling by more than 50 percent.

Egg Production To Contract in 1988

The egg market exhibited some strength in February and March. The New York wholesale grade-A price rose from 50-51 cents per dozen in the first part of February to 56-57 cents in March. This year's prices were below a year earlier and below the breakeven level of 65 cents. In 1987, mid-March prices were 61 cents.

Production during 1988 is expected to be nearly unchanged from 1987. First-quarter production probably was 1.7 percent greater than a year earlier. Output totals in January and February were 1 and 5 percent ahead of a year before, respectively. However, most of the 5-percent increase in February can be attributed to the extra day in leap year.

The U.S. flock during February was about the same size as a year earlier. The birds may be marginally older; 20.6 percent had completed a molt, compared with 20.1 a year earlier. However, slaughter of light-type hens increased considerably from November 1987 through February 1988, indicating a shift toward a younger, more efficient flock; this could explain the 2-percent increase from a year earlier in eggs per layer on March 1.

New York wholesale grade-A large eggs are forecast to average 56-62 cents per dozen during 1988, possibly below the 62-cent average in 1987. Prices averaged 55 cents for first-quarter 1988. The second-quarter average is expected to be in the 50-54 cent range.

Average prices are projected to rise during the second half of 1988 because of seasonally heavier baking demand for fourth-quarter holidays and lower expected production than a year earlier.

U.S. egg exports declined to a moderate level of 7.7 million dozen in January 1988, primarily because of a drop in exports to Iraq. Sales were also down to Japan, to 2.7 million dozen, nearly all in

egg products. Exports continued strong to Hong Kong, at 1.3 million dozen, all shell eggs. EEP sales accounted for increased shell egg exports to the United Arab Emirates and to Oman.

Higher Milk Per Cow Boosts Surplus

Government dairy purchases under the price support program have been boosted by increases in milk production and sluggish commercial use of higher fat dairy products such as butter and cream. During January-March, the CCC bought the equivalent of 4.2 billion pounds of milk, half again more than a year earlier. This brought purchases during the first half of the marketing year above 6 billion pounds, more than during all of 1986/87.

Increases in milk production have been driven by large gains in milk per cow. March milk per cow (21 selected States) was 2.5 percent above a year earlier on a daily average basis. However, this is well below the 5.5-percent increase during October-December, possibly reflecting lower milk-feed price ratios.

Sales of higher fat dairy products slowed during the second half of 1987, following several years of brisk growth. Commercial use of butter, cream, and fluid cream either declined or posted only small increases. Some recovery in these products is indicated in recent months, but sales are not strong.

January-March removals of butter by CCC were almost two-thirds higher than a year before, reflecting a jump in the surplus of higher fat products. However, rising sales of products consisting mostly of solids-not-fat absorbed increases in production. Purchases of nonfat dry milk during January-March were slightly below a year earlier. Cheese purchases were slightly larger than a year earlier during February-March, after posting large increases during October-January.

Surpluses of dairy products likely will diminish as 1988 progresses. Increases in milk output probably will shrink, while commercial use is expected to recover. Even so, annual removals by CCC probably will total 7-9 billion pounds, up from 6.7 billion in 1987.

For further information, contact: Kevin Bost and Leland Southard, hogs; Mark Weimar and Larry Witucki, broilers, turkeys, and eggs; Steve Reed, cattle; and Jim Miller, dairy. All are at (202) 786-1285.

FIELD CROP OVERVIEW

Stocks, Planting Intentions Suggest Price Strength

The March 1 *Grain Stocks* report provides information on the disappearance of stocks during December-February and gives data on old-crop supplies available. The *Prospective Plantings* report gives a detailed view of what area farmers intended as of early March to plant to major spring crops. The planting information is used in forecasting 1988 production. The stocks and planting reports provide analysts with information to help predict 1988/89 supplies.

U.S. Wheat Supplies Tighten

Wheat stocks on March 1 were 1,908 million bushels, down 342 million or 15 percent from a year earlier. The largest decline was in off-farm stocks, down 20 percent. CCC inventory declines over the quarter were 305 million bushels.

Planting intentions showed the expected increase (12 percent) in Durum acreage. However, the decline in other spring wheat areas, especially in Hard Red Spring States, was greater than many industry analysts expected.

Dry weather in the Pacific Northwest is limiting yield prospects for that region's 1988/89 wheat crop. However, crops generally look good elsewhere. In April, the Federal Register published a 1988/89 wheat production forecast of 2,125 million bushels when USDA requested comments on the 1989/90 acreage reduction program.

If production is near the 2,125 million bushels and disappearance in 1988/89 nearly matches 1987/88, U.S. ending stocks on June 1, 1989, could fall to 0.8 billion bushels, only 31 percent of utilization. In recent years, stocks have been 50 to 100 percent of utilization.

Wheat Exports Up

U.S. wheat exports during 1987/88 are up more than 50 percent from last year's depressed level, to the largest figure since 1981/82. A total of 43.5 million tons is expected to be shipped this year.

A combination of stronger foreign demand, smaller competitor exports, and the sharp midyear expansion in the Export Enhancement Program contributed to this growth. Because of these changes, the U.S. world market share, excluding intra-EC trade, is expected to be 41 percent.

World wheat trade in 1987/88 is expected to total 105 million tons, up 14 million from last year and only 2 million below the 1984/85 record. The USSR and China have been the largest factors in the increase from last year.

In China, demand pressures have pushed imports up sharply, while a reduced crop in the USSR led to an import rise of 6 million tons. Other countries where imports are expected to be above early projections include Iran, Bangladesh, and Korea.

Among U.S. competitors, the European Community suffered poor weather that held down the size of the wheat crop and reduced supplies of quality wheat. In Australia, larger-than-expected cuts in acreage because of low prices reduced the wheat crop by nearly 20 percent from the first estimates.

Large new EEP initiatives to the USSR and China, together with expansion of the program to cover new markets, resulted in 25 million tons of new initiatives between October 1 and mid-April. This exceeded total initiatives during the preceding 12 months.

U.S. Rice Area Increases 19 Percent

The planting intentions survey indicated that 2.80 million acres could be planted to rice in 1988, up 19 percent from 1987. Most of the increase is related to the lowering of the acreage reduction program from 35 to 25 percent. Also, indications are that reduced enrollment in the 50/92 acreage diversion program was probably a factor.

Higher Prices Slow Acreage Decline

The *Prospective Plantings* report indicates that in March farmers planned to plant 871,000 fewer acres than last year. This is in marked contrast to 1987, when area planted to the same crops fell 24.1 million acres, and to 1986, when the decline was 14.2 million.

Higher prices, lower acreage reduction requirements for cotton and rice programs, reduced paid land diversion payments, and possibly lower program participation rates are partially offsetting the continued entry of area into the long-term Conservation Reserve Program.

Prices received by farmers in March 1988 were up from a year earlier: all crops, by 10 percent; feed grains, by 22; cotton, 21; oil crops, 19; and food grains, 13. However, crop prices are not high by historical standards, and corn is still below the national average loan rate. Over the same period, the index of prices paid, interest, taxes, and farm wage rates increased only 4.4 percent.

Additions to the CRP will continue to decrease planted area. Through the fifth signup in the fall of 1987, 22 million acres had been removed from crop production. The law sets a goal of 40-45 million by the end of 1990. However, the sixth signup in early 1988 did not attract heavy bidding, making achievement of the goal more difficult.

Farmers intend to plant more corn, cotton, soybeans, rice, and Durum wheat than last year. They plan fewer acres of oats, sorghum, other spring wheat, barley, and dry edible beans, and have planted less winter wheat.

Planting intentions for oats area show a decline of 1.6 million acres, the largest drop for any crop this year. This decline is not necessarily a reduction in oats for harvest; in 1987, only 39 percent of the plantings were harvested for grain. Oats are often planted as a conserving crop on acreage idled by Government programs. Thus, the decline in oats plantings may signify less area moving into Government programs and lower program participation rates, or it may result from other cropping patterns.

Among individual States, field crop planting intentions are up in North and South Dakota, Nebraska, Louisiana, Mississippi, Ohio, and Arkansas. Fewer acres are planned in Iowa, Kansas, and Montana.

Iowa's decline of 1.2 million acres in oats was the largest for a single crop in a single State. However, corn and soybean increases in Iowa will offset almost half of that decrease.

Illinois also showed a large drop in oats, plus a decline in soybeans, but these are almost offset by increases in corn and winter wheat.

Kansas planted 500,000 fewer acres of winter wheat, and reductions are indicated for Kansas sorghum, soybeans, and corn. The net decline including winter wheat will be 913,000 acres, a 5-percent drop from area planted for 1987, as a large acreage enters the CRP.

Farmers' Planting Intentions by Crop and Region 1/

Crop	National	SD	IL	IA	TX	KS	MT	ND	MI	CA	LA	MS	MO	NE	AR	IN	OH
								Thousand acres									
Oats	-1620	+100	-600	-1200	0	+10	+15	+200	0	-15	---	---	-50	+40	+18	-200	0
Corn	+1220	+150	+550	+500	+100	-50	-5	0	-100	+25	-65	0	0	+100	-5	+100	+100
Cotton	+1157	---	---	---	+304	0	---	---	---	+170	+165	+130	+30	---	+105	---	---
Sorghum	-1077	-60	-20	---	-350	-200	---	---	---	-5	0	-30	-120	-50	-50	---	---
Other spring wheat	-926	-250	---	---	---	---	-400	-300	---	---	---	---	---	---	---	---	---
Barley	-759	-170	---	---	-30	-20	-250	-50	-5	-40	---	---	---	-20	---	---	---
Soybeans	+575	+300	-100	+250	+60	-150	---	+160	+150	---	+250	0	-400	+50	+50	0	0
Rice	+451	---	---	---	+80	---	---	---	---	+50	+100	+50	+11	---	+160	---	---
Dry edible beans	-422	---	---	---	---	-3	-1	-110	-220	-22	---	---	---	0	---	---	---
Durum wheat	+386	+40	---	---	---	---	+5	+300	---	0	---	---	---	---	---	---	---
Hay	+367	+250	0	-100	+160	0	+100	-50	+100	-80	+45	+10	-120	+100	+5	-10	0
Winter wheat	-191	+100	+100	-20	-500	-500	0	+50	+200	-50	+10	+150	+650	+100	+120	+90	+250
Flaxseed	-123	-20	---	---	---	---	---	-100	---	---	---	---	---	---	---	---	---
Peanuts	+48	---	---	---	+20	---	---	---	---	---	---	---	---	---	---	---	---
Tobacco	+32	---	---	---	---	---	---	---	---	---	---	---	2/	---	---	0	2/
Sugar-beets	+21	---	---	---	+2	---	2/	+2	+6	-2	---	---	---	+5	---	---	1
Sunflower	-10	-30	---	---	+5	---	---	+50	---	---	---	---	---	---	---	---	---
Sweet-potatoes	+1	---	---	---	2/	---	---	---	---	2/	+1	-1	---	---	---	---	---
Total area change	-871	+410	-70	-570	-149	-913	-536	+152	+131	+31	+506	+310	+1	+325	+403	-20	+351

1/ Difference between March 1988 intentions and 1987 planted area. 2/ Less than 500 acres.

Michigan registered a sharp 47-percent decline in planting intentions for dry edible beans, and lower corn, but increased area of soybeans, winter wheat, and hay.

Louisiana farmers signaled increases in soybeans, cotton, rice, hay, winter wheat, and sweetpotatoes. Total planting intentions for the State, including hay and winter wheat, are up 506,000 acres, an increase of 14 percent from 1987.

North Dakota indicated a shift out of dry edible beans and an increase in soybeans. There is a large shift from Hard Red Spring wheat to Durum. Sunflower intentions were up, but flax down.

South Dakota had big shifts between crops, with area moving out of Hard Red Spring wheat and barley and into soybeans, corn, oats, and Durum wheat. Including gains in winter wheat and hay, total area indications for the State are up 410,000 acres, an increase of 3 percent from last year.

Montana indicated a large move out of Hard Red Spring wheat and barley but only minor changes for other crops. Total spring-planted field crops in Montana may see a 10-percent drop. *[Ed Allen (202) 786-3313]*

The rest of the area expansion shows that some producers may plant outside the program in 1988. Higher market prices and tight U.S. supplies, combined with drought-reduced world exportable supplies have provided an incentive for some producers to forego program protection and benefits in 1988.

Intentions indicate that 1988 long grain acreage, as a percent of total acreage, may rebound in 1988 to 76 percent, close to the high reached in 1985. Between 1980 and 1985, long grain acreage as a share of the total grew from 65 to 77 percent. Reasons included market price shifts favoring long grain over medium grain, increases in the loan rate differential favoring long grain, and faster yield increases for long grain rice relative to medium.

Between 1985 and 1987, long grain acreage decreased, as the favorable factors weakened. For 1988, the critically tight supply of long grain and anticipated strong demand seem to have encouraged producers to swing back to long grain production. However, the loan differential for 1988 is the same as for 1987.

World Rice Trade Forecast To Decline

World rice production is down 4 percent this year, largely because of the late and poor monsoon rains in South and Southeast Asia. Normally, production shortfalls and declining stocks would lead to larger world trade.

But this year shortfalls have hit the major exporters, including the United States and Thailand. This, together with sharply higher prices, is to cut world trade in 1988 nearly 20 percent.

U.S. rice exports in 1987/88 (August/July) are expected to total 73 million cwt, 12 million below last year. Export sales have been very slow, and a number of purchasers are curtailing rice purchases, shifting to other grains, or buying lower priced rice available from suppliers such as Uruguay and Australia.

Corn Exports Rise, Carryover Stocks Fall

U.S. corn stocks on March 1 were 7.6 billion bushels, 7.5 percent below a year earlier, but still larger than many trade analysts expected. The stock reduction implies utilization of 2.14 billion bushels during December-February, 4 percent above a year earlier. When exports are estimated, this implies a decline in domestic use from September-November 1987. The livestock numbers do not correlate well with the changes in feed use.

U.S. corn exports are forecast to increase more than 10 percent this marketing year (September-August), to 1.7 billion bushels. As with wheat, the projected U.S. share of the corn market is higher because of lower competitor production and export availability. The corn crop in Thailand is off sharply from last year, and most of China's large crop is going to meet rising domestic needs. Foreign exports are projected to be the lowest since 1979/80.

World corn trade is projected to be marginally below last year's depressed level. While world trade in wheat has recovered to within 2 million tons of its peak, corn trade will fall short of the best year (1980/81) by 22 million tons.

Soybean & Oil Exports Up, Meal Exports Down in 1988

U.S. farmers intend to plant 58.0 million acres of soybeans in 1988, a scant one-half-million more than in 1987.

The attractiveness of the corn program and the existence of established acreage bases in the Corn Belt make it difficult for farmers to give up a certain return on corn in exchange for an uncertain return on soybeans. The choice is more difficult if switching to soybeans means that a farmer uses some feed grain acreage base on which program benefits are calculated for subsequent years.

Plantings of soybeans in the western Corn Belt were stable at 21-plus million acres for 1984-86, then dropped to 19.9 million in 1987 because of the corn bonus signup under USDA's long-term Conservation Reserve Program (CRP). Intentions show a slip to 19.8 million in 1988, as declines in Missouri and Kansas offset increases in South Dakota and Iowa.

Soybean producers in the Delta States (Arkansas, Louisiana, and Mississippi) indicated intentions to plant 7.7 million acres. This total is up substantially from 6.8 million intended last year and close to the 7.4 million acres actually planted to soybeans last year in this region.

Soybean farmers in the Delta are less likely than Corn Belt farmers to have a base in any of the program crops. As a result, price expectations for soybeans will have a greater effect on plantings than in the Corn Belt.

The planting intentions report is just that—intentions. Recent history indicates soybean acreage could rise or fall a half-million to a million by June, depending on soybean prices.

The South, the Delta, and some States on the western fringe of the Corn Belt probably will be most sensitive to changes in the price outlook; soybean planting decisions in most of the Corn Belt are pretty well set. During May and June, the most important factors affecting prices will be the size of South American crops, domestic crop prospects, and uncertainty regarding USSR purchases.

Despite record world oilseed production, including a significant increase in Southern Hemisphere soybean production, 1987/88 will be a good year for exports of U.S. oilseeds and oilseed products.

U.S. soybean sales have been strong since the year began, and total U.S. soybean exports for the season are projected to grow by 4 percent to 785 million bushels. Export prospects have strengthened because of dry and hot March weather in Brazil that cut the production estimate.

U.S. soybean oil sales are running well ahead of last year's, and exports for the year are expected to total 1 million tons, the most since 1979/80. The Export Enhancement Program and other U.S. export programs boosted U.S. soybean oil exports. Sunflowerseed oil and cottonseed oil are also being sold under the EEP. Exports of sunflowerseed oil are expected to reach 290,000 tons, the second highest ever.

In contrast to beans and oil, soybean meal exports are down 10 percent this year. Favorable crushing margins for foreign processors boosted U.S. bean exports but slowed sales of U.S. meal. The big oilseed crop in the EC, the United States' largest soybean meal market, has also hurt meal exports.

Cotton Plantings Higher

U.S. cotton planting intentions are up 11 percent from 1987. This increase, smaller than expected, indicates that soybean prices are strong enough to keep soybean area from moving into cotton outside the cotton program. Area entering the CRP or 50/92 programs may also be limiting increases in cotton acreage. Cotton area increases can be accounted for by the lower acreage reduction required in 1988, 12.5 percent compared with 25 percent in 1987.

U.S. cotton exports in 1987/88 are projected to reach 6.6 million bales, slightly below last year. Competitor countries produced more cotton than last year, cutting export prospects. *[Ed Allen (202) 786-1840 and Frederic Surls (202) 786-1824]*

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, rice; Peter Riley, world feed grains; Larry Van Meir, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, peanuts. World information, (202) 786-1820; domestic, (202) 786-1840.

Upcoming Economic Reports

Summary Released	Title
May	
5	Livestock & Poultry
10	World Ag. Supply & Demand
16	Western Europe
17	Feed
18	Agricultural Outlook
20	Wheat
23	USSR
24	Farm Income & Finance
26	Exports
31	Cotton & Wool

Generic Certificate Update

During February, USDA issued $0.3 billion of generic certificates, bringing the total certificate issuance since April 1986 to $15.9 billion. In March, another $1.4 billion of certificates were paid to corn and sorghum producers as 5-month deficiency payments.

Certificate redemptions were heavy over the December 1987-February 1988 quarter. This brought total redemptions from April 1986 through March 29, 1988, to an estimated value of over $14.8 billion.

Corn exchanges comprised 65 percent of total exchanges during the December-February quarter; wheat exchanges exceeded 27 percent. Also, redemptions for 9-month producer loans continue to comprise the bulk of certificate exchanges for corn. Over the quarter, 82 percent of corn exchanges were to redeem stocks under loan, while 18 percent were for CCC stocks.

Of wheat exchanges over December-February, 86 percent were for CCC stocks, mostly through the wheat auctions held by the CCC. From the time the CCC began the auctions last November, through April 13, 1988, 366.4 million bushels of wheat were auctioned. This reflects $971.1 million of generic certificates, with an average bid price of $2.65 per bushel.

Beginning April 2, 1988, CCC auctions from "old" wheat catalogs (dated July 17 and November 2, 1987) were discontinued. Since April 1, auctions have been held once or twice weekly with targeted exchanges of 20 million bushels per week.

Certificate premiums have declined from their recent high, 10 percent above face value, reached last August. Premiums have averaged only 1.6 percent since March 1. Rising corn prices have reduced "PIK-and-roll" opportunities;

Generic Certificate Exchanges & Premiums

Period	Certificate exchanges	Premiums as a percent of face value
	Million $	Percent
1986/87	6,531	2/ 106.1
June-Aug. 86	692	1/ 111.4
Sept.-Nov. 86	810	114.5
Dec. 86-Feb. 87	1,506	105.5
Mar.-May 87	3,523	103.4
1987/88	6,541	2/ 104.7
June-Aug. 87	964	106.5
Sept.-Nov. 87	2,277	105.5
Dec. 87-Feb. 88	3/ 3,300	103.7

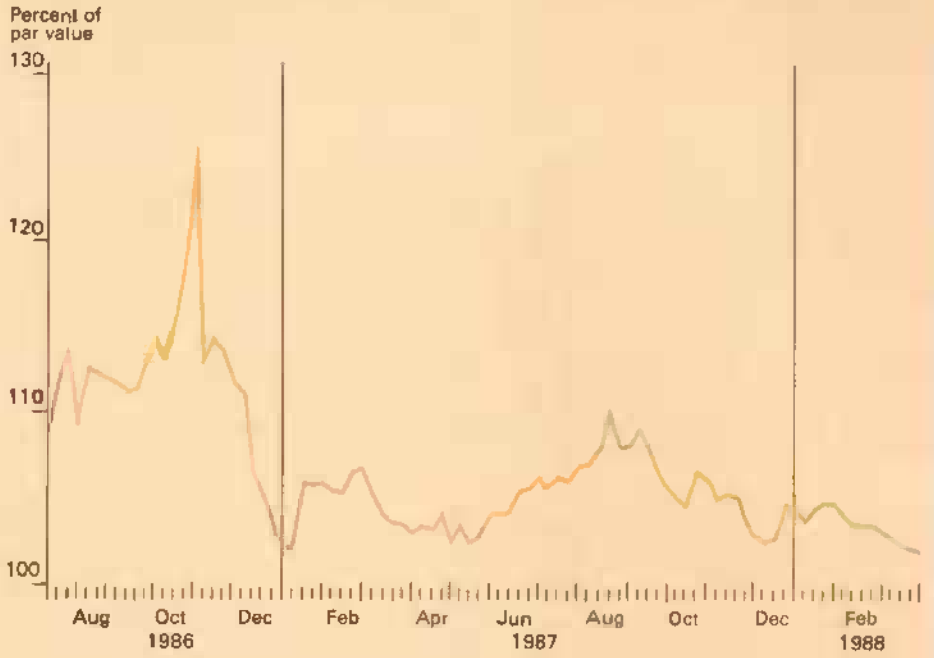
1/ Average of period July 14, 1986-August 31, 1986. 2/ Weighted by certificate exchanges. 3/ Estimated.

with higher prices, producers receive little additional benefit from redeeming loan stocks with certificates rather than with cash.

Current certificate premiums likely reflect the percentage return to be made by redeeming certificates at posted county prices or bid prices and selling the commodities on spot markets. In the near term, certificate premiums should continue small.

Issuance of certificates this spring as advance 1988-crop deficiency payments may encourage some producers to hold certificates until next fall, when the demand to exchange certificates for new-crop stocks may force premiums up. *[Joe Glauber (202) 786-1840]*

Value of Generic Certificates Has Fallen



Cumulative Generic Certificate Exchanges as of March 29, 1988

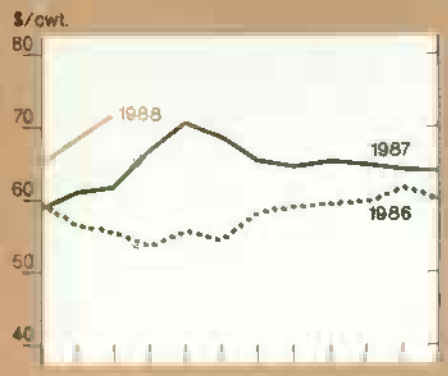
Commodity 1/	CCC inventory 2/	Producer loans	Total
FOOD GRAINS			
Wheat			
Volume (mil. bu.)	654.1	539.6	1,193.7
Value (mil. $)	1,660.2	1,369.5	3,029.7
Rice			
Volume (mil. cwt)	42.2	0.4	42.5
Value (mil. $)	153.8	1.2	155.0
FEED GRAINS			
Corn			
Volume (mil. bu.)	516.2	5,850.0	6,366.2
Value (mil. $)	853.6	9,674.4	10,528.0
Grain sorghum			
Volume (mil. bu.)	87.3	407.2	494.6
Value (mil. $)	143.0	667.1	810.2
Barley			
Volume (mil. bu.)	68.5	108.6	177.1
Value (mil. $)	96.8	153.3	250.1
COTTON			
Volume (mil. bales)	.89	5.96	6.84
RYE, OATS, SOYBEANS			
Value (mil. $)	14.1	38.0	52.1
Total value (mil. $) 3/	2,921.5	11,903.6	14,825.1

1/ Other program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese. 2/ CCC loans as of March 25, 1988. 3/ Does not include values for cotton exchanges.

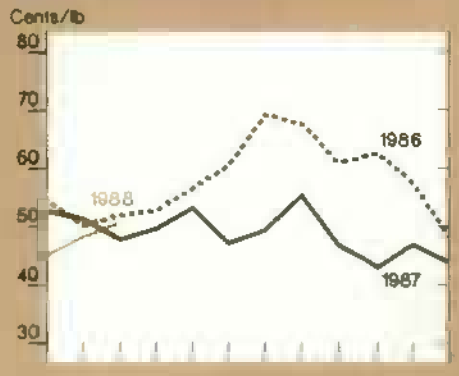
Source: Agricultural Stabilization and Conservation Service, USDA

Commodity Market Prices

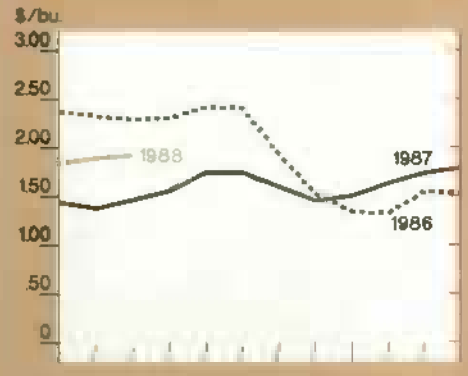
Choice steers, Omaha



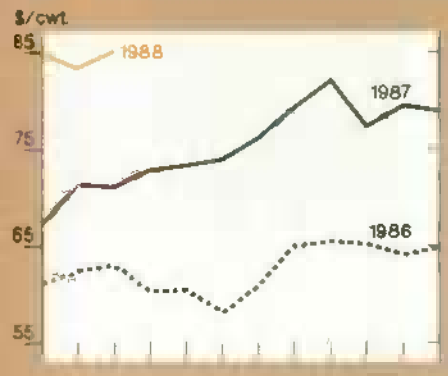
Broilers, 12-city average



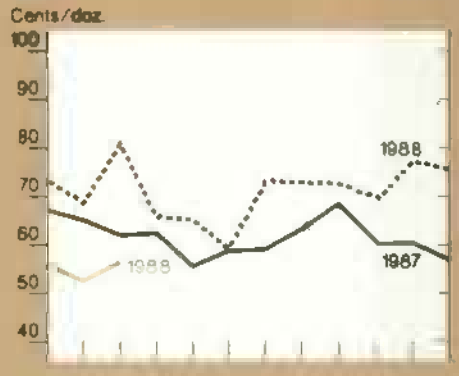
Corn, Chicago[3]



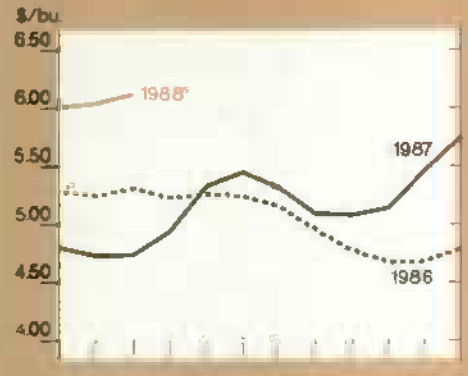
Feeder cattle, Kansas City[1]



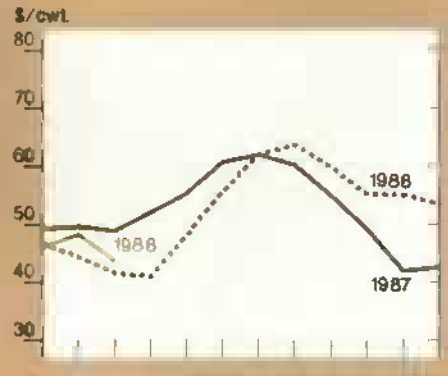
Eggs, New York[2]



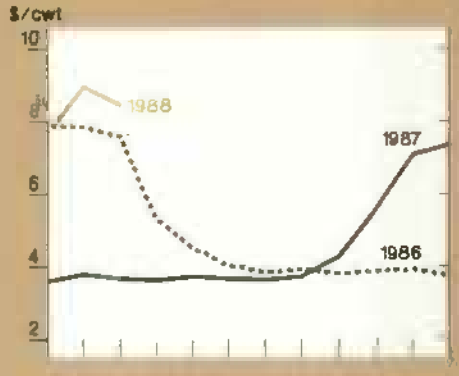
Soybeans, Chicago[4]



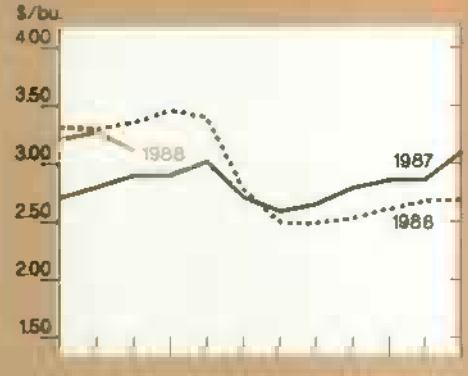
Barrows and gilts, 7 markets



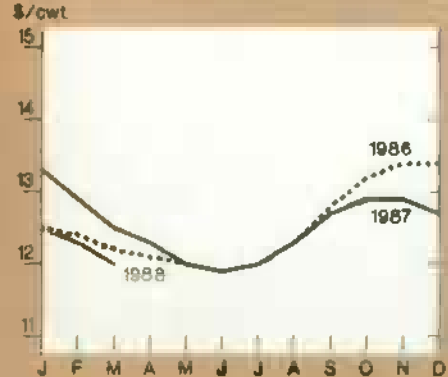
Rice (rough), SW Louisiana



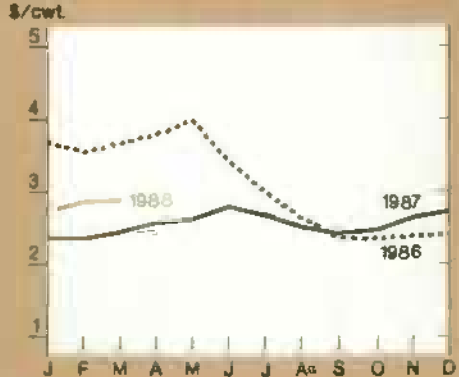
Wheat, Kansas City[5]



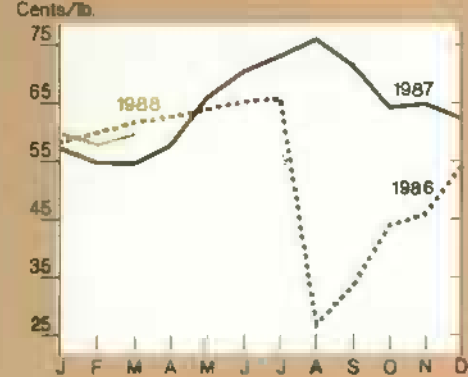
All milk



Sorghum, Kansas City



Cotton, average spot market



[1]600-700 lbs., medium no. 2. [2]Grade A Large. [4]No. 1 Yellow. [5]No. 2 Yellow. [6]No. 1 HRW.

HIGH-VALUE CROP OVERVIEW

Grower Fruit Prices To Fall During Spring

Sizable storage stocks of apples and pears and larger remaining supplies of fresh oranges and grapefruit probably will push the index of grower prices for all fruit below a year earlier this spring.

Strawberry prices were strong during the winter, but will fall below a year earlier this spring as the prospective larger harvest in California contributes to a more-than-seasonal increase in supply.

Apples and pears in storage at the beginning of March exceeded year-earlier stocks by 40 and 17 percent, respectively. A record 9.6-billion-pound apple harvest and a larger-than-normal pear crop last fall depressed prices throughout the winter and into the spring.

Processing orange prices likely will continue strong through the spring despite a larger U.S. crop. After Brazilian exporters raised their prices for frozen concentrated orange juice (FCOJ), Florida packers raised f.o.b. prices to a record $5.74 a dozen 6-ounce cans. This compares with $4.33 a year earlier.

Dry Bean, Onion Acreage To Drop

Onion growers indicated during March that they plan to plant 1 percent less area in 1988 than last year. Smaller area of summer nonstorage onions and California processing onions likely will offset a slight gain in storage and spring onions. Texas' summer nonstorage acreage likely will drop nearly 20 percent from last year. Cold weather and shortages of labor for planting this spring may reduce acreage of the large-sweet Texas summer onion crop even further.

Dry bean producers indicate intentions to reduce their 1988 plantings 23 percent from last year. Michigan farmers cut their intentions to 250,000 acres, just over half of last year's planted area. The largest producer of dry beans, Michigan, primarily raises navy beans, which account for about a fourth of all dry bean production.

Producers in North Dakota and Minnesota indicate they plan to cut dry bean acreage 30 and 33 percent, respectively. Low prices for the 1987 crop are blamed. Prices last season fell nearly 20 percent from 1986 because growers harvested nearly 15 percent more beans.

Sweetpotato producers plan to expand plantings 1 percent in 1988. Production fell 5 percent in 1987 from the previous year, and prices averaged about 20 percent higher. Acreage increases are expected in California, Louisiana, and North Carolina, while declines are seen in Alabama, Maryland, Mississippi, South Carolina, and Texas.

U.S. Sugar Output Will Continue High

U.S. sugar producers likely will respond to continuation of the attractive prices they received for the record 1987 crop by producing another record or near-record crop in 1988. The U.S. sugar program creates a price floor for sugarcane and sugarbeets which, at present, provides an incentive to expand acreage relative to other crops.

Sugarbeet farmers indicated during March that they will plant 1.6 percent more acreage in 1988 than the 1.27 million last season. Most of the additional beets will be grown in the Great Lakes, Great Plains, and Northwest regions.

Sugar yields may drop because a dry fall in the Red River Valley depleted soil moisture reserves, and the Northwest region reports below-average soil moisture, reservoir levels, and snow packs for this time of year. With greater acreage and possibly lower yields, beet sugar production may about equal last year's 3.96 million tons.

Analysts expect sugarcane acreage to expand marginally from last year and production at least to equal 1987/88's 3.37 million tons, assuming growing conditions remain good. Hawaiian acreage for processing may rise slightly, and the State's production should match its customary 1 million tons.

Texas and Louisiana sugarcane acreages may rise slightly. With normal growing conditions, Texas will produce about 100,000 tons of sugar, while Louisiana will produce between 650,000 and 750,000 tons. Florida's acreage and production are forecast to be about the same as in 1987.

Tobacco Production To Rise in 1988

Expanded marketing quotas for flue-cured and burley tobaccos likely will result in a larger 1988 crop. Tobacco farmers indicated intentions during March to expand their 1988 acreage by 5 percent from last year.

USDA raised the basic 1988 allotment for flue-cured tobacco by 7 percent and that for burley by 2 percent. Because farmers may carry unused quotas forward from the previous year, the effective quotas exceed last year's by 9.5 percent for flue-cured and about 8 percent for burley.

A smaller crop in 1987 and increased use of tobacco by U.S. manufacturers will reduce end-of-season stocks for flue-cured and burley. Carryover at the beginning of the 1988/89 marketing season could fall as much as 11 percent from last year for flue-cured and 12 percent for burley.

Strong export demand for manufactured U.S. tobacco products (mainly cigarettes) has boosted tobacco use. The value of U.S. leaf and tobacco product exports rose 24 percent during calendar 1987 to a record $3.4 billion.

The tobacco trade surplus in 1987, $2.7 billion, was record high. The trade surplus may rise even further in 1988; the less expensive dollar, lower U.S. prices, and some delayed shipments from 1987 sales will boost leaf exports. A good-quality flue-cured crop could buoy exports late in the calendar year. However, competition from Zimbabwe and Brazil is expected to limit growth in U.S. tobacco leaf exports. *[Glenn Zepp (202) 786-1882]*

For further information, contact: Ben Huang, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco. All are at (202) 786-1886.

Commodity Spotlights

How To Set Federal Grazing Fees?

How should fees be set for producers who graze beef cattle, sheep, and other livestock on Federal land? The issue has continued to draw significant attention since the expiration of the Public Rangeland Improvement Act of 1978 (PRIA) on December 31, 1985. PRIA provided a 7-year trial formula for establishing grazing fees and distributing fee receipts.

PRIA established a grazing fee formula which takes the base value of $1.23 per animal unit month (AUM) obtained in a 1966 Western Livestock Grazing Survey and multiplies it by the forage value index plus the index of beef cattle prices minus the prices paid index for selected nonfarm inputs divided by 100. Fee receipts have been distributed among range improvement (50 percent), State and local governments (25 percent), and the Federal Treasury (25 percent).

The PRIA fee-setting formula was continued by an executive order signed on February 14, 1986, with a minimum fee of $1.35. The executive order provided Congress time to develop new grazing fee legislation. Several bills have been introduced, but none has yet passed either house, so the executive order has been extended again for 1988.

Grazing fees remain an issue because of the need to maintain and improve Federal rangelands and to offset range administration costs in a time of budget deficits. They are also an issue because Congress has never set a long-term method of assessing fees.

A significant point of debate is the value of Federal grazing compared with private grazing. Two bills recently introduced by Rep. George Darden (H.R. 1481) and Rep. Mike Synar (H.R. 2621) propose similar fee systems; Synar added a requirement that 25 percent of range improvement funds be devoted to riparian areas.

Both bills adopt a system of differential pricing among grazing areas, as opposed to the current single-price system. In 1985, the Secretaries of Agriculture and Interior, in a Congressional report entitled "Grazing Fee Review and Evaluation," divided the West into six pricing areas for mature cattle and horses, with a second tier of prices for yearling cattle. The Darden and Synar bills follow this division scheme.

In the bills, the 1983 appraisal values for each class of livestock per head per month replace the base value per AUM used in the PRIA fee formula and in the executive order. The base appraised value for each area and class of livestock would be adjusted by the change in the forage value index, as with PRIA. Sheep are to be assessed areawide, with the base value equal to $1.05 per head and indexed by the change in the forage value index.

The forage value index would be expanded to include quotes of private land lease rates from 16 Western States, rather than the previous 11 Western States. This would bring higher valued grazing land into the forage value index. The Darden/Synar bills borrow the concept of the 1969 fee system (base value adjusted by the forage value index), which preceded PRIA, but with the addition of updated regional base values. The bills cap the rate of fee adjustment by 25 percent up or down per year for 3 years.

The bills would move the Federal grazing fee closer to private land lease rates as estimated in a 1983 appraisal study for USDA and Interior. Federal fees would keep pace with changes in private rates through the forage value index. There would not be an adjustment for cattle prices or for nonranch input prices as there is in the PRIA formula.

While some permit holders might be unable to afford such fee increases, 1,000 other ranchers have subleased Federal grazing land from the permit holder at $5-$7 per AUM, near private rates. While subleasing is against regulations, it indicates that structural readjustment would take place if allowed.

Another bill, H.R. 1899, sponsored by Rep. Ron Marlenee, would reinstate the PRIA system without change and make it permanent. This bill would provide lower fees and reflect changes in forage values and cattle prices relative to purchased input costs, up to a maximum 25-percent change in a year.

Under the National Land Management Planning Act of 1976, the Department of Agriculture is charged with measuring the value of grazing Federal land. USDA looks at three yardsticks: (1) revenues from the existing fee system, (2) market prices, and (3) willingness to pay.

In 1986, fee receipts were $1.35 per AUM. Also in 1986, the Forest Service and the Bureau of Land Management estimated the cost of administering the grazing permit program at $2.44 to $2.87 per AUM. Thus, revenues from the $1.35 fee are below the Federal cost for the program, ruling out the use of the existing fee system to increase value.

The market price approach to establishing a value for grazing indicates private grazing values are in a range of $6-$8 per AUM. When adjustments have been made for differing lease conditions and services provided in private versus Federal leases, they yield values of $4-$6 per AUM for Federal grazing. Thus, the market indicates a grazing value three to four times above the current fee.

Producers' ability to pay has been estimated by ERS at $5-$7 per AUM. The concept of ability to pay was substituted for willingness to pay because it is more measurable. The ability to pay is higher than appraised values for grazing Federal land but less than the market values for grazing private land.

The differences between fees, market values, appraisals, and estimates of ability to pay are controversial. Environmental groups want more range improvement and have viewed increasing fees as a way of boosting range betterment funds, because half of the fees go to range improvements.

The value of Federal grazing permits under the current fee system has been incorporated into land values, as individuals have bought and sold ranches with permits attached. In 1982, the average permit value was $68 per AUM.

Technically, a rancher cannot directly transfer a Federal grazing permit, but in most cases the Federal land management agencies have reissued the permit to the new owner. Increased fees would reduce the permit value and thus lower the asset values for current permit holders. *[Terry Crawford (202) 786-1712]*

U.S. Broiler Exports Set Record in 1987

Continuing the turnaround that started in 1985, U.S. broiler export volume in 1987 increased by 33 percent from 1986. Total exports, 752 million pounds, equaled about 5 percent of U.S. production. The previous high of 719 million pounds in 1981 was surpassed by 4.6 percent. With lower export prices, 1987 value was up 31.3 percent over 1986, to $353.8 million.

The Export Enhancement Program played a major role in 1987 broiler exports, accounting for about 26 percent of the total. Also important were lower prices and the less expensive dollar. The 12-city wholesale broiler price in 1986 averaged a relatively high 56.9 cents a pound; prices in 1987 fell to an average of 47.4, the lowest since 1982's 46.4 cents.

Leading Import Markets Similar to 1981

The leading importers of U.S. broilers during 1987 were not much different from those in 1981. Concentration of exports has increased, however, with the 10 leading importers taking 91 percent of exports in 1987, compared with 82 percent in 1981.

Three of the rapid-growth economies of East Asia—Japan, Hong Kong, and Singapore—accounted for 45 percent of U.S. broiler exports last year, up from 31 percent in 1981. Egypt and Iraq, prompted by animal protein shortages and aided by the EEP, took 24 percent, nearly as high as their 26-percent share during 1981. Iraq's imports were a record.

The Canadian and Caribbean markets have increased their shares since 1981. But exports to Mexico and South America, except for Colombia, have dropped.

East Asian Imports Strong

Japan has been the major importer of U.S. broilers for years. Its share of the total in 1987, 23 percent, was the lowest since the 19 percent of 1981; nevertheless, Japan's 1987 import volume was a record. Japan's total poultry meat imports (mostly broiler meat) have been growing steadily, and in 1987 they were about 440 million pounds, double the 1981 level.

Poultry meat's share of Japan's total meat imports increased in 1986 and 1987 to about 21 percent. However, combined red meat and poultry meat consumption remains relatively low, 36 kilograms per capita in 1986.

Domestic broiler production in Japan continues to increase more slowly than consumption. Broiler operations are getting larger but face increasing competition from imports. Japan has lowered some import duties for chicken during the 1980's, as agreed in the Tokyo Round of the Multilateral Trade Negotiations.

Some Japanese investment in poultry production has been made in other countries such as Thailand and China. Boned chicken imports from Thailand are increasing rapidly, and broilers are replacing live birds from China.

Further-processed chicken imports fit in with the fast food boom in Japan. With more women working, increased service has become important. Competition between chicken and beef is likely to intensify in the Japanese fast food market as the beef import quota is raised, particularly if consumer beef prices drop substantially.

Japan and the newly industrializing East Asian countries of Hong Kong, Singapore, Taiwan, and South Korea offer opportunities for further growth of U.S. broiler exports. Hong Kong and Singapore have been big markets for many years, but South Korea has a barrier to fresh or frozen chicken meat imports, and poultry meat consumption is very low.

Taiwan increased U.S. broiler imports in 1987 nearly fivefold from 1986, to 2.2 million pounds. However, as domestic poultry prices dropped in Taiwan, its agricultural organization pressured the Government to curtail further imports. Tastes in Taiwan are changing, and fast foods, including Western-type broilers, are increasingly in demand.

U.S. Broiler Exports

Major importers	1986 volume	1987 volume	Share of U.S. broiler exports in 1987
	1,000 lbs.		Percent
Japan	167,145	171,199	22.8
Iraq	0	128,923	17.2
Hong Kong	77,609	120,114	16.0
Egypt	55,166	55,851	7.4
Singapore	53,528	52,332	7.0
Canada	31,712	46,100	6.1
Jamaica	55,531	41,666	5.5
Mexico	29,239	27,632	3.7
Leeward-Windward Is.	22,380	23,262	3.1
Netherlands Antilles	11,458	17,944	2.4
Other countries	62,388	66,531	8.8
Total	566,156	751,554	100.0

Hong Kong was a strong commercial market in 1987, with U.S. broiler exports increasing 55 percent above a year earlier. Poultry meat is relatively low priced, and the already high consumption rate, nearly 29 kilograms per capita in 1986, is increasing. U.S. poultry is extensively promoted. Fast food sales are up and new supermarkets favor imported chicken and other convenience foods.

Egypt Buys Under EEP

Egypt was the first country targeted for the EEP sale of chicken meat, in late 1985. As of March 1, 1988, 145.5 million pounds had been contracted for. Egypt's per capita meat consumption remains a relatively low 16.3 kilograms (4.2 kilograms of this is poultry meat), and it is declining.

The U.S. share of the Egyptian market dropped below one-half in 1987, with renewed subsidized competition from the EC and Brazil. Egypt's broiler imports grew as domestic production dropped. Production increased sharply late in 1987, though, as subsidized imported corn again became available.

Exports to Canada Reach a Record

Canada's imports of U.S. broilers reached a record 46 million pounds in 1987. The United States is the exclusive supplier. Canada exports some poultry meat to the United States—about 4.6 million pounds in 1987.

Poultry meat consumption is increasing more rapidly than production in Canada. Consumption was estimated at 25.6 kilograms per capita in 1986, with broilers at 20.3 kilograms. As in the United States, Canada's per capita beef consumption has been dropping since the late 1970's.

Chicken meat production in Canada was up 9.5 percent in 1987 from 1986. Retail prices were firm during most of the year, unlike U.S. prices.

Government intervention is high in the Canadian poultry industry. Producer quotas and prices and import quotas are set by publicly established bodies, and consumer prices have tended to be higher than those in the United States. During the third quarter, wholesale prices of fresh whole broilers in Ontario were the equivalent of U.S. $0.74 per pound, in contrast to the 12-city wholesale price of $0.49 in the United States.

Under the proposed trade pact with the United States, Canada would retain global poultry import quotas. But it would raise the quota for chicken meat in 1989 from 6.3 percent of its previous year's production to 7.5 percent, a 19-percent gain.

Moreover, Canada's global quotas have often been supplemented to relieve brief spot shortages. Short-term supplementary import quotas could raise future Canadian imports of U.S. poultry meats above the new quotas under the trade agreement, as they have under the current quota system.

Slower Growth in Broiler Exports Likely This Year

The prospects for U.S. broiler exports are strongest in Japan and other East Asian countries where favorable economic growth continues. Not much change is expected in exports to U.S. neighbors and the Caribbean.

Growth could slow in Canada because of increased competition from larger supplies of pork. In Mexico, domestic broiler production is falling, with consumption and imports constrained by a weak capacity to purchase.

The Middle East continues to be the least predictable poultry market. In spite of its trade agreement with the United States, Iraq recently announced that further imports of poultry were banned, including those under the EEP program. Reasons given are increases in domestic production and producer pressures for protection. However, the ban may not last long.

In Egypt, further imports were also recently stopped because of pressures to raise producer prices and to save scarce foreign exchange.

Per capita broiler meat consumption is on an upward trend in many countries. Relatively low poultry meat prices, compared with red meat and fish prices, favor higher poultry consumption. In late March, the dollar was lower against several currencies, including those of the EC, Japan, Taiwan, and Canada, compared with both a year earlier and 6 months earlier. This should boost U.S. price competitiveness.

Subsidies remain important to broiler exports. In light of moderate growth prospects for many of the world's economies in 1988, a big boost in world poultry meat trade is unlikely unless subsides are increased. In 1987, the EEP resulted in large increases in U.S. broiler exports to Iraq, Egypt, and Spain's Canary Islands. In the fall of 1987, however, the EC raised export subsidies. For 1988, competition through subsidies will continue, and it could intensify in the Middle East.

U.S. broiler exports likely will increase modestly in 1988. If EEP sales were reduced or removed, though, broiler exports likely would decline instead.
[Larry Witucki (202) 786-1714]

Changes in Sugar Demand

The 12 years between 1975 and 1987 saw a great change in the U.S. sweetener market: Sugar, which had been the premier U.S. sweetener since colonial times, slipped to second place behind corn sweeteners, especially high fructose corn syrup (HFCS).

In the 1970's, high sugar prices and low-cost HFCS undermined sugar's market. HFCS consumption climbed rapidly, from 0.5 million tons, dry basis, in 1975 to 5.8 million in 1987. The decline in sugar consumption had wide-ranging effects on deliveries of sugar among different uses and in different locations.

Demand Changes Vary by Market

Beverages.—The beverage industry has been the biggest source of change in sugar deliveries over the last 12 years. The industry's sugar deliveries had reached 2.6 million tons in 1978, but by last year they were down over 90 percent, to only 212,000 tons.

HFCS successfully competed with liquid sugar in both quality and price. Bottlers were already set up to handle liquid sugar, making the switch to HFCS easy. And the competitive nature of the soft drink industry compelled manufacturers to lower input costs.

In 1978, sugar deliveries to the beverage industry accounted for 39 percent of all

industrial uses (the largest market for sugar) and 25 percent of total sugar use. By 1987, these figures had tumbled to 5 and 3 percent, respectively.

Canned, bottled, and frozen foods.—Sugar used in canned, bottled, and frozen foods has fallen from 700,000 tons in 1975 to about 400,000 in 1987, a decrease of 43 percent. This drop is second only to the loss in the beverage market.

Like bottlers, food manufacturers switched from sugar to HFCS to reduce input costs. There was a limit to the switch, however, because in some applications replacement was not economically or technically feasible. In jam production, for example, total replacement of sugar by liquid HFCS reduces jelling and changes texture.

Another reason for the reduction in sugar use by food manufacturers was the switch to packing fruit in light syrup, rather than the traditional heavy syrup. The downward trend in sugar deliveries to this sector has slowed, but it may continue as new products are developed using low-cost HFCS or low-calorie alternatives.

Bakery and cereal products.—Over the last decade, the bakery and cereal industry has become the largest industrial user of sugar. It is now second only to wholesale grocers as the largest destination of all U.S. sugar deliveries, industrial and nonindustrial.

However, sugar deliveries have not reflected fully the growth of demand for bakery and cereal items. One reason is the trend toward less sugar in many products. A second reason is, again, replacement by HFCS in products where sugar's browning and other characteristics are not needed.

Confectionery products.—Sugar shipments for confectionery manufacturing have not been replaced by HFCS to the same extent as in other uses because the HFCS liquid is less adaptable to confectionery use.

Sugar deliveries to confectioneries increased by over 375,000 short tons by 1987; this was a 49-percent rise above 1975. However, this growth has moderated in recent years through greater imports of confectionery products. Such imports grew substantially during 1983-86, when domestic sugar prices far exceeded the world price.

Dairy products.—Deliveries of sugar to the dairy industry have been relatively stable. The 450,000-ton total in 1987 was down only 40,000 tons from 1975. HFCS's technical substitution for sugar in dairy products is limited because it lowers the melting point of ice cream. On the negative side, though, sugar demand for use in dairy products has not risen either, because consumption of ice cream (the major dairy use for sugar) has not expanded much.

All other food and nonfood uses.—Sugar deliveries to other food uses not described above and to nonfood uses have totaled between 10 and 13 percent of all industrial use between 1975 and 1987. Deliveries for all other food uses have varied from year to year and show no consistent trend. Deliveries for nonfood uses (mainly pharmaceutical, tobacco, and pet foods) have been growing slowly and steadily.

Total industrial uses.—Sugar deliveries for all industrial uses peaked at 6.5 million tons in 1978, then fell to 4.4 million in 1987. However, if the drop associated with the beverage industry is excluded, the trend is flat: Nonbeverage deliveries totaled 4.1 million tons in 1977, fell to 3.7 million in 1982, but then recouped to almost 4.2 million in 1987.

Nonindustrial uses.—The share of total U.S. sugar deliveries for nonindustrial uses grew from 35 percent in 1975 to 42 in 1987. The increase resulted from contraction in industrial uses rather than expansion in nonindustrial. No category of nonindustrial sugar deliveries showed sustained growth during 1975-87.

Changes Within Regions Reflect Shifts Among Uses

There was little change in shares of total sugar deliveries during 1975-87 among regions: New England, Middle Atlantic, North Central, South, and West. Changes in industrial and nonindustrial markets generally offset each other. In the industrial market, changes in each region's share of sugar marketings were strongly influenced by changes in the beverage industry.

New England.—The share of all U.S. industrial sugar deliveries to New England has fallen slightly, to 2.7 percent in 1987. The beverage market accounted for less than 3 percent of New England's industrial sugar deliveries in 1987, down from over 40 percent in 1975.

Middle Atlantic.—The Middle Atlantic continues to account for about 19 percent of total U.S. industrial sugar deliveries. Decreases to the beverage industry and bottled, canned, and frozen food manufacturers were offset by increases to confectionery manufacturers.

North Central.—This region has always been the largest industrial market for sugar because of its concentration of bakery/cereal and confectionery manufacturers. During 1975-87, deliveries rose 148,000 and 181,000 tons to those two sectors, respectively.

However, overall sugar deliveries to the region's industrial markets fell 120,000 tons, because of lower deliveries to the beverage and canned, bottled, and frozen food sectors. The North Central region accounted for over 40 percent of industrial deliveries in 1987, up from 34 percent in 1975.

South and West.—Both the South and West have lower shares of total industrial deliveries than in 1975. Sugar for beverage use had been large, accounting for 52 and 34 percent, respectively. By 1987, these had each fallen to 6 percent.

In the nonindustrial market, sugar deliveries to New England and the Middle Atlantic have declined. Deliveries to the North Central region have been stable since 1975, while deliveries to the South and West, stimulated by population growth, have increased.

Outlook: Slow Growth

With the halt in massive losses to HFCS, sugar deliveries have started to rise once more. In 1988, deliveries are forecast to increase 1 to 2 percent.

Future technical advances in corn sweetener processing and product applications, plus the introduction of new low-calorie sweeteners, can provide further competition for sugar. However, over the short term, sugar deliveries to both the industrial and nonindustrial markets are likely to grow slowly, in line with population and personal income. *[David Harvey (202) 786-1885]*

World Agriculture and Trade

BULK EXPORTS vs. HIGH-VALUE PRODUCTS

U.S. agricultural exports in fiscal 1988 are forecast at $32.5 billion and 142.5 million metric tons. The largest gains from last year are coming in bulk rather than high-value products (see table 30). Agricultural exports are expected to grow 16 percent in value and 10 percent in volume from last season.

The United States is gaining in world market share in fiscal 1988, particularly for grains and cotton. Relatively low world prices and improved U.S. competitiveness have reduced production incentives for foreign competitors. Also, weather-reduced crops in several importing and exporting countries have provided opportunities for U.S. export growth.

Higher prices for bulk commodities will help boost export value in 1988. Prices are expected to average higher for U.S. grains, cotton, and soybeans, as falling world stocks coincide with growing use. High-value product (HVP) exports are expected to benefit again from the lower dollar, but bulk products are expected to account for most of the $4.6-billion increase in value.

With bulk exports outpacing HVP's this year, the bulk share of total export value will climb possibly a tenth from fiscal 1987's 60 percent. This would be the first substantial increase since the bulk share of exports peaked at 80 percent in 1974.

How Much Value Is Added To U.S. Farm Products?

With HVP a large but declining share of U.S. agricultural exports, the question arises as to how much value above material costs is added to U.S. agricultural exports. Value added is the contribution made by labor and capital to the cost of a product. It equals the market value of the product less the cost of materials.

Agricultural exports with relatively high value added include semiprocessed products such as soybean meal and fresh meats, and highly processed products such as prepared meats and canned fruits. Unprocessed products also gain some value added by the time they are exported, through transportation and other handling costs. This is true for both low- and high-priced products; both wheat and apples increase in value between farm gate and export.

Comparing export prices with farm prices provides a quick estimate of value added to unprocessed commodities. A farm price-export price comparison is also relevant for processed products when the proportions of farm products used in processing are known.

For example, in 1985 the farm price for raisin grapes was $157 per metric ton, while the average price of U.S. raisin exports that year was $1,375 per metric ton. Most of the price difference reflects differing water content; on average, it takes nearly 5 tons of grapes to make 1 ton of raisins.

The adjusted export price of grapes transformed into raisins was therefore $302 per metric ton of grapes. The value added, or costs and profits from drying and handling, came to $145 per ton of grapes or 48 percent of the export value.

For high-value products, about 55 percent of the export value is added. In contrast, bulk products average about 20 percent value added. These are estimates from detailed 1984 and 1985 data. U.S. Department of Commerce data show value added varying between 42 and 44 percent for all U.S. manufactures between 1976 and 1985. Value added for food and kindred products grew during that period from 29 to 35 percent.

The value added in HVP agricultural exports is higher than for bulk products, but more variable. This estimate of value added is *not* an estimate of the total impact of agricultural exports on the U.S. economy. Total impact would include value added by farming and farmers' input purchases. Similarly, it would include economic activity created by purchases of machinery, labor, and other services by either farmers or processors.

A 1985 ERS study (AIB #496) using input-output analysis of the entire U.S. economy found that each dollar earned from agricultural exports in 1983 stimulated another $1.37 of U.S. output. Approximately 80 percent of this additional economic activity accrued to the nonfarm sector.

The estimates for value added by bulk and HVP exports are accounting measures indicating how much additional economic activity is directly supported by foreign customers. Since the post-farm value added by HVP's is about two-and-a-half times that added by bulk products, each dollar of HVP exports probably stimulates more than $1.37 of additional economic activity, while the figure for bulk exports is probably lower.

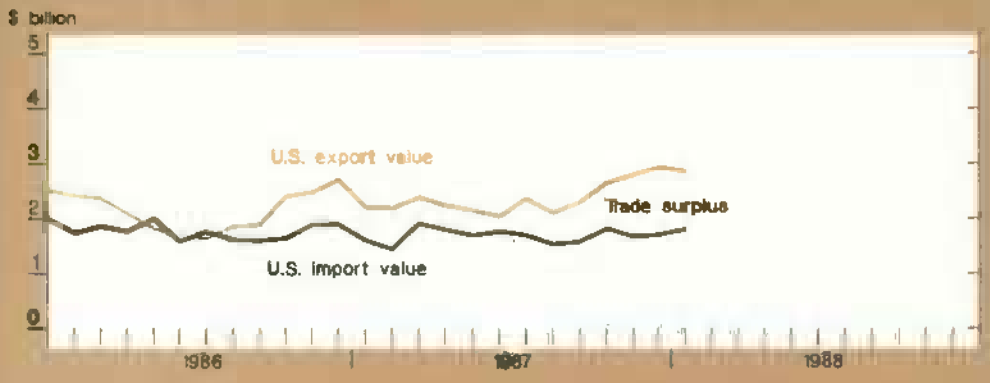
This year's shift toward more bulk products for exports implies that farmers account for relatively more of this year's export increase and processors less, compared with fiscal 1987.

Bulk Product Exports To Reach $21 Billion

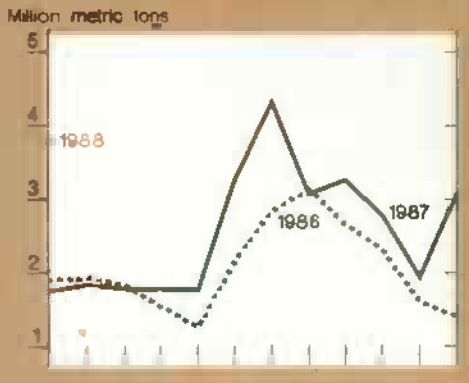
U.S. wheat and flour exports this season are estimated at 39 million tons, up 9.4 million or 32 percent from fiscal 1987. Their export value is expected to climb to $4.4 billion. Much of this gain reflects increased sales to the USSR under the EEP (see the special article in this issue on Soviet grain imports).

U.S. Agricultural Trade Indicators

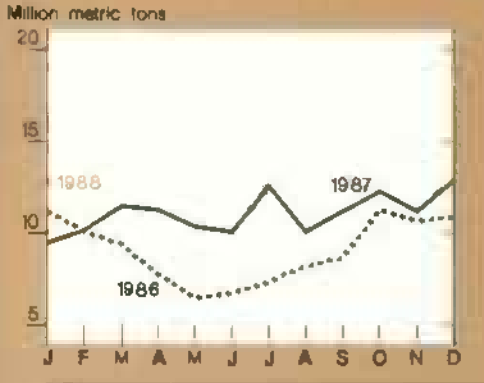
U.S. agricultural trade balance



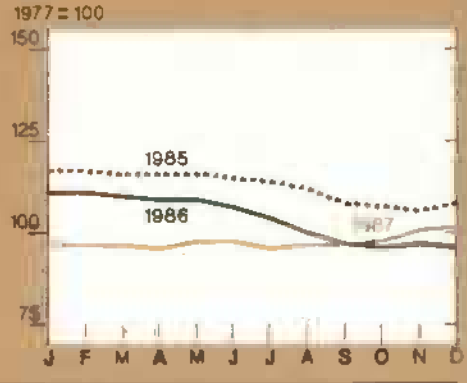
U.S. wheat exports



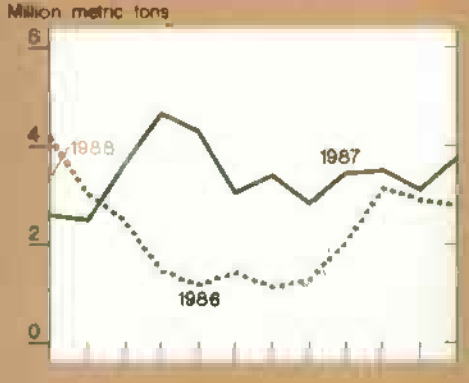
Export volume



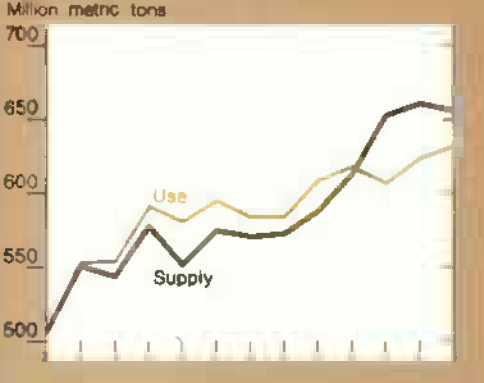
Index of export prices



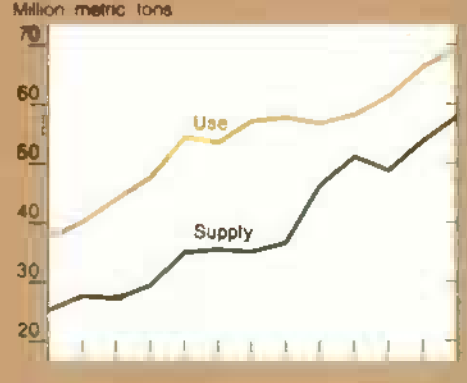
U.S. corn exports



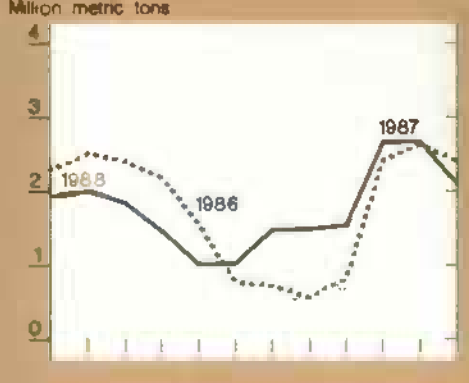
Foreign supply & use of coarse grains



Foreign supply & use of soybeans



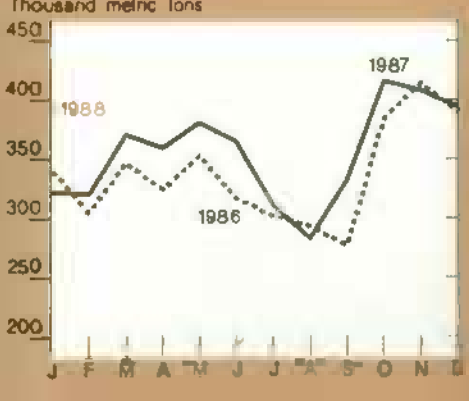
U.S. soybean exports



U.S. share of world coarse grains exports[1,2]

U.S. share of world soybean exports

U.S. fruit & vegetable exports[3]



[1]Excluding intra-EC trade [2]October-September years [3]Includes fruit juices.

The EEP is also expected to boost wheat exports to China, North Africa, and the Middle East. The program accounts for more than 60 percent of all wheat sales.

Coarse grain exports are expected to climb 10 percent in volume this year and 24 percent in value. Tighter exportable supplies in competitor countries and favorable U.S. corn prices continue to bolster foreign use of U.S. corn. Coarse grain exports in the first half of fiscal 1988 have been strong to the Pacific Rim, the USSR, and the Middle East.

In addition to poor weather in some competing countries, the United States is also benefiting from a 5-million-ton increase in China's net imports since 1986. China has cut its trade deficit, increasing its ability to make purchases, and grain supplies there are relatively tight.

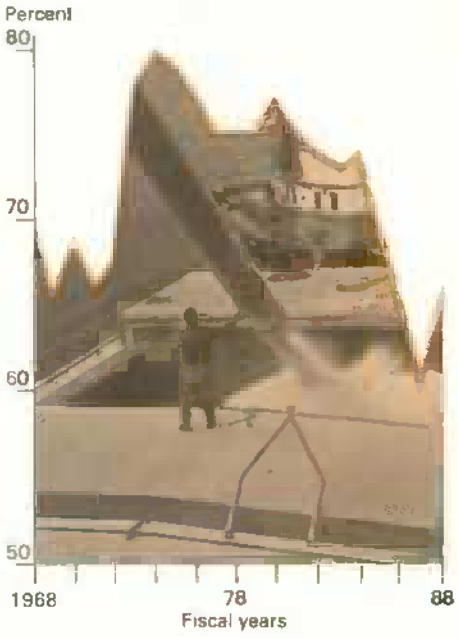
Population growth reached 1.4 percent in China in 1987, the highest in 4 years, and income growth remains strong. While these factors increase consumption, grain production in 1987 remained below China's 1984 record of 407 million tons. In fiscal 1987, China imported U.S. corn for the first time since 1982, and sales have continued in 1988. U.S. corn exports have also risen as the United States has recovered markets in the Far East lost by China.

Prospects are improved for soybean oil exports, and prices for soybeans and soybean oil are expected to be higher. These factors may spell a $1-billion increase in U.S. oilseed and products exports, to $7.4 billion. Greater demand in Asia and attractive offers under the EEP have boosted soybean oil sales.

U.S. cotton exports this season are forecast to gain about $800 million, reaching $2.2 billion and 1.5 million tons. Exports will climb because of rising consumption and tighter world supplies than last year.

Exports of all bulk products are forecast to increase about $4.5 billion in 1988 to $21.3 billion. Since the EEP is expected to play such a large role in boosting wheat, barley, and vegetable oil exports, some of the increased value added to the U.S. economy will actually come from Government transfers rather than from foreign buyers.

Bulk Products Comprise Bigger Share of Farm Exports In '88



Close to one-fifth of the value of all U.S. agricultural exports now involves either the EEP, food aid, credit guarantees, or other U.S. Government programs. This is a greater proportion than during the late 1970's and early 1980's, but still below peaks reached in the 1950's and 1960's.

High-Value Product Exports Will Hit Record $11 Billion

Increases in exportable U.S. supplies of citrus fruit, deciduous fruit, and tree nuts are expected to help boost this season's horticultural exports $350 million, to $3.5 billion. The lagged effect of the lower U.S. dollar will help exports, particularly to Japan and Canada.

Horticultural product exports to Canada continued rising in fiscal 1988 despite increases there in both fruit and vegetable production. In contrast, weather-reduced vegetable and citrus crops in the EC will help sales in the largest market for U.S. horticultural products.

The 1988 livestock and livestock product export estimate stands near $5.0 billion, unchanged from last year. Poultry meat exports are expected to make another strong showing this year after reaching a near-record 376,000 tons in fiscal 1987. However, lower sales volume is forecast for the livestock sector—especially for live cattle, beef, and animal fats. (See the commodity spotlight entitled "U.S. Broiler Exports Set Record in 1987.")

U.S. animal product exports to the EC in 1988 are expected to remain near 1987. The EC ban on beef imports from animals produced using growth hormones will not be implemented until January 1989. Discussions in the EC continue in three areas: the hormone ban, the EC's approval of foreign plants producing meat and livestock products for export to the EC, and administration of the Community's high-quality beef quota.

Halfway through the Japanese fiscal year, which ended in March, Japan raised its fiscal-year quota for beef imports by 37,000 tons, to 214,000, to meet the strong demand for beef. The high yen helped encourage imports of feeder calves, mostly from Australia and the United States.

The value of HVP exports is expected to move up slightly, reaching a record $11.2 billion in 1988. U.S. Government transfers boosting HVP exports include the Targeted Export Assistance Program. Most of the $110 million allocated under this program during fiscal 1988 is for promotions of HVP. *[Stephen MacDonald (202) 786-1822]*

PROGRAMS BOOST U.S. FARM EXPORTS

Substantial agricultural exports were made under U.S. export programs in fiscal 1987. Some analysts had thought that the role of export programs would diminish as lower loan rates and a depreciated dollar made U.S. commodity prices more competitive. However, other exporters have continued subsidies, and the dollar has not depreciated significantly in some important U.S. export markets.

Many markets face tight foreign exchange constraints or high food aid needs. The United States operates a spectrum of export programs to assist U.S. agricultural exports in these circumstances.

World Trade Environment Is Highly Competitive

U.S. exporters operate in a competitive trade environment influenced by other exporters' subsidies and importers' bar-

riers. For example, the EC operates a system of export subsidies which enables its high-priced wheat to be sold on world markets. Since 1978, the EC has joined the traditional big four (Argentina, Australia, Canada, and the United States) as a wheat exporter, using high internal prices coupled with export subsidies. These policies shifted the EC from a net importer to a net exporter.

Some developing countries are deeply in debt. High debt-service costs force them to cut back on imports. While the debt crisis has receded from newspaper headlines, the debt burden and its foreign exchange constraints remain, and U.S. agricultural exports to these countries are down.

All major wheat exporters, including EC members, provide credit or credit guarantees to help importers overcome foreign exchange constraints. As wheat price competition has intensified, so has credit competition. For example, it is often suspected that credit terms offered by the French in specific markets are more favorable than the terms of other exporters.

Hunger persists in many countries. For 69 developing countries, estimates of additional food needs in 1987/88 are substantially above estimates for 1986/87. To meet their needs and to help their governments pursue development objectives, food aid, in the form of concessional loans and grants, is helpful. Several donor countries provide cereal aid; the United States provides more than all other donors combined.

In the competitive world environment, the United States operates a variety of export programs: the Export Enhancement Program, CCC export credit guarantee programs, the Targeted Export Assistance Program, and food aid programs under the authority of P.L. 480 and Section 416.

EEP Helps Fight Subsidized Competition

The EEP was announced in May 1985 to help U.S. exporters meet competition from subsidizing exporters in specific markets. The market value of EEP sales from October 1, 1987, to March 31, 1988, was more than $1.8 billion. These sales have consisted of about 17 million tons of wheat, more than 1 million tons of barley, and smaller amounts of barley malt, dairy cattle, flour, frozen poultry, rice, sorghum, table eggs, and vegetable oil.

The chief markets for wheat under the program have been the USSR, Morocco, Algeria, Egypt, and China. Saudi Arabia has been the main destination for barley.

The EEP generally operates by way of a two-step, competitive bid process to help U.S. exporters compete while minimizing bonuses awarded from CCC stocks. Initially, the CCC targets a country for a specific quantity of a commodity. Then, exporters compete for sales to the targeted market. Knowing they might obtain a bonus from the CCC enables them to offer competitive prices to that country.

Having made sales contingent on receiving a CCC bonus, the U.S. exporters then bid against each other for the bonus. The CCC evaluates both the sales price to the foreign purchaser and the bonus bids. The bonuses are awarded to the exporter whose sales price falls within a predetermined range, and whose bonus bid also falls within an acceptable range.

The selected exporter or exporters then complete the sale, present proof of the commodities' arrival at their destination, and receive the bonus in the form of generic certificates redeemable for CCC commodities. The exporters may either sell the generic certificates or redeem them for CCC stocks.

CCC Credit Guarantees Help Debt-Burdened Importers

The CCC operates two export credit guarantee programs to help importers overcome foreign exchange constraints. These programs facilitate farm exports by guaranteeing repayment of private credit extended to importers. The programs help some food aid recipients to participate in commercial markets.

The CCC Export Credit Guarantee Program (known as GSM-102) ensures repayment of credit for up to 3 years. Major markets under the program are Iraq, Mexico, Algeria, Korea, and Egypt. Credit guarantees approved under the fiscal 1988 program as of mid-March totaled approximately $1.7 billion.

The Food Security Act of 1985 complemented the GSM-102 program with the Intermediate Export Credit Guarantee Program (GSM-103), which guarantees repayment of private credit extended for 3 to 10 years. Chief markets under the GSM-103 program are Morocco and Iraq. GSM-103 credit guarantees approved under the fiscal 1988 program came to about $140 million as of mid-March.

TEA Aids Producers Hurt by Competitors' Policies

Authorized by the Food Security Act of 1985, the TEA program assists U.S. producers whose exports have been found, under Section 301 of the Trade Act of 1974, to be hurt by a foreign government's policies.

Under the program, the CCC provides generic commodity certificates to adversely affected producer groups. The certificates may be redeemed for CCC commodities or sold to help finance market promotions such as trade fairs or demonstration projects in a targeted market. USDA has allocated $110 million for the fiscal 1988 program. Many of the targeted commodities have been high-value products such as fruit, vegetables, and nuts.

There are several differences between the EEP and the TEA program. First is the type of assistance given. The EEP provides a price subsidy to specified exporters for specified commodities sold to specified markets. The TEA program promotes exports of a specified category or brand of American commodity or products in specified markets. The benefits of TEA promotion apply to all affected exporters.

Second, while the EEP and TEA both counter competitor subsidies, the TEA program can also be used against unfair import policies of potential markets.

Third, while the EEP involves mostly bulk commodities, the TEA involves mostly high-value products. Providing EEP price subsidies or credit guarantees is effective in offsetting competitor trade practices and increasing exports of bulk commodities, which are relatively indistinguishable from source to source.

However, it may be easier to distinguish and differentiate the source of high-value products. Cultivating consumer tastes

and processor preferences through promotion as TEA does is probably a more effective way to build demand for these U.S. exports.

P.L. 480 Authorizes Food Donations

U.S. food aid is distributed mainly through the P.L. 480 program, with lesser amounts going by authority of Section 416(b) of the Agricultural Act of 1949, as amended. Under P.L. 480 Title I, the U.S. Government provides long-term concessional credit to designated countries for purchase of specific U.S. agricultural commodities. The Food Security Act of 1985 reinstated sales of U.S. farm products for local currencies under Title I.

P.L. 480 Title II includes donations through government-to-government channels, private voluntary organizations, and the World Food Program. Under the Food for Development Program, P.L. 480 Title III, a Title I loan may be forgiven if specified development measures are achieved by the recipient government. The fiscal 1988 level for all the P.L. 480 programs was set at about $1.5 billion.

The Section 416 program involves donation of CCC-owned commodities overseas. The Secretary of Agriculture announced in March that 2.6 million tons of CCC grain and oilseeds will be available under the Section 416 program for fiscal 1988. This includes 1 million tons of wheat, 1 million tons of corn, 500,000 tons of sorghum, and 50,000 tons of soybeans. No dairy products or rice is currently available under the program.

Numerous Commodities Benefit From Programs

While it is difficult to quantify the amount of commodities exported under the TEA program, the volume of exports made under other major export programs is more easily known. These programs account for a significant share of specific commodity exports.

Wheat.—Export programs accounted for 60-70 percent of fiscal 1987 wheat exports. Four of the top five markets for U.S. wheat in 1987 were chief markets for wheat under the EEP, CCC credit guarantees, or food aid.

Japan, the top market in value terms for U.S. wheat, was the exception, purchasing its wheat outside U.S. export programs. However, the second largest buyer, the USSR, made significant purchases under the EEP. Sales to the USSR accounted for about 10 percent of all U.S. wheat exports.

Egypt, the number three market, and Algeria, number five, bought U.S. wheat under a combination of the EEP and GSM-102. This combination was especially well suited to those fiercely fought-over markets with tight foreign exchange constraints.

In addition, Egypt was the largest P.L. 480 wheat recipient. Importers in South Korea, a graduate of P.L. 480 and the fourth largest U.S. market, purchased significant amounts through the GSM-102 program.

Vegetable oils.—More than half of fiscal 1987 vegetable oil exports involved export programs. Three of the top five markets purchased or received U.S. vegetable oil under either the GSM-102 program or P.L. 480. However, a very small amount is estimated to have been shipped under the EEP.

Pakistan, the largest U.S. market for vegetable oils, was the largest destination under the GSM-102 program. Buyers in Iraq, the fourth largest, and Mexico, the fifth largest market for all U.S. vegetable oils, also purchased under GSM-102. Venezuela and Japan, the number two and three markets, purchased outside of U.S. export programs.

Rice.—Iraq, one of the world's largest importers of rice, was the biggest export market for U.S. rice in 1987, accounting for more than 20 percent of U.S. rice export value. Iraqi importers purchased all their U.S. rice under GSM-102, and the United States has maintained a high market share there.

Food aid shipments, mainly to the Dominican Republic and Sierra Leone, accounted for another 15-20 percent of U.S. rice shipments. Sales under the EEP destined for Jordan and Turkey accounted for only a small percentage of total rice exports in 1987.

While the marketing loan program has made U.S. rice exports more price competitive, the foreign exchange constraint of some rice importers, notably Iraq, has meant that the GSM-102 program is an important tool to assist U.S. rice exports.

Feed grains.—The United States holds a commanding share of world feed grain trade. In 1987/88, the U.S. share is up to about 60 percent, from its low of 45 in 1985/86.

Most U.S. feed grain exports are made outside export programs. However, importers in Mexico and South Korea, the second and third largest U.S. markets, purchased under the GSM-102 program in fiscal 1987, and Saudi Arabia, the fifth largest market, imported all its U.S. barley under the EEP. Barley exports rose sharply in fiscal 1987, mainly because of the EEP and Saudi Arabian import subsidies.

Cotton.—U.S. export programs played a relatively small role in cotton exports in fiscal 1987. Purchases outside U.S. export programs increased because the marketing loan program helped make prices more competitive, and demand strengthened in major importing countries.

However, South Korea, the second largest export market for U.S. cotton, made significant purchases under GSM-102 in 1987. Shipments under P.L. 480 accounted for a small amount of exports.

Export Programs Affect Farm and Nonfarm Policies

Government programs likely will continue to play an important role in U.S. agricultural exports. Such programs are only one facet of U.S. agricultural policy; they have links to domestic agricultural and macroeconomic policies.

For example, a targeted export subsidy program generally strengthens domestic prices by reducing domestic supply. If domestic wheat prices strengthen while competitors' prices do not, the bonus needed rises. But the larger amount of bonuses can release CCC-owned commodities onto the market and may depress domestic prices. Lower domestic prices in turn could increase farmers' deficiency payments. Careful analysis is needed to understand the complex relationships between domestic and foreign agricultural policies. *[Mark Smith (202) 786-1820]*

OUTLOOK FOR BANK FAILURES

The Federal Deposit Insurance Corporation (FDIC) expects that about 200 banks will be declared insolvent and closed this year, about the same as last year. Through the first quarter of 1988, 46 banks folded, while an additional eight received open-bank assistance from FDIC.

However, the unexpected deterioration at many of First RepublicBank's 76 bank subsidiaries in the last few months may push this year's failures over last year's post-Depression record. First RepublicBank is a Texas-based multibank-holding company that specializes in energy and real-estate lending in the Southwest.

Recently, the FDIC pumped a billion dollars into First Republic's banks, guaranteeing 100 percent of their deposits to prevent runs by depositors with deposits above the statutory $100,000 Federal insurance maximum. A formal assistance package for First Republic likely will be negotiated this year.

Another Texas multibank holding company, First City Bancorporation, with 60 bank subsidiaries, is also receiving an FDIC open-bank assistance package that has just been finalized.

In these assistance packages, each bank's stockholders lose as if the bank had been closed, and the FDIC almost always ousts the old management team. Before this year, few open-bank assistance packages were finalized, so the discrepancy between closures and total failures was slight.

Energy-Sector Banks Now the Most Troubled

First RepublicBank's problems typify the changing nature of stress borne by the nation's banks. While First Republic's banks together hold $230 million in agricultural loans, only one of the 76 meets the technical definition of an agricultural bank, that is, having an above-average percentage of farm loans. Back in 1985, almost 60 percent of the banks that failed were agricultural.

While 75 agricultural banks failed in 1987, they accounted for only about 45 percent of all failures. While agricultural banks have begun to fare somewhat better, last year the failure rate for banks tied to the energy sector soared.

Geographically, the failures are growing more concentrated in the States with the most energy banks—Texas, Oklahoma, and Louisiana—and less common in agricultural States in the Corn Belt and Northern Plains, where farm banks had been hit hard.

The financial health of banks lags behind conditions in the nonbanking economy by up to several years. So, while the debt crisis began to subside for farmers in 1985, conditions at the nation's 4,700 agricultural banks did not begin to improve until mid-1986.

In contrast, conditions at banks lending to oil and gas producers or headquartered in oil- and gas-dependent counties continue to worsen. Domestic crude oil prices peaked in 1981 at $34.70 a barrel, and had fallen almost 30 percent by the end of 1985. But the big shock hit the oil market in 1986, when domestic crude prices fell more than 61 percent in the first 7 months.

Oil- and gas-dependent economies began contracting in 1982, but they fell into a depression in 1986. While conditions in the oil market have since improved slightly, prices are still below their mid-1970's range. The current precarious health of banks in energy-dependent counties reflects the oil-market gyrations in 1986 and early 1987.

Fewer But Larger Banks Likely To Fail in 1988

According to an ERS forecasting model, banking problems are becoming narrower but deeper in 1988. More large banks and banks affiliated with multibank-holding companies are likely to fail, despite regulators' reluctance to move against such institutions for fear of rocking the financial system.

Because about 1 percent of U.S. banks failed in 1986, banks with forecast failure probabilities above 1 percent are defined as the most vulnerable to failure. This procedure identified 1,760 banks most vulnerable to failure in 1987. Not only did most that failed in 1987 come from this vulnerable group, but the surviving ones are most at risk of failure in subsequent years.

Commercial Bank Failures, 1981-88

	Total 1/	Agricultural 2/	Rural 3/
1981	7	1	3
1982	33	10	19
1983	44	7	15
1984	78	31	41
1985	118	69	81
1986	144	66	83
1987	202	75	98
1988 (through 3/31)	54	12	18

1/ Totals exclude mutual savings banks, savings and loan associations, commercial banks not insured by the FDIC, and banks headquartered in U.S. possessions and territories. Failures are those declared insolvent and closed by their chartering authorities plus those granted open bank assistance by the FDIC. 2/ Banks for which the ratio of farm loans (both production and real estate) to total loans exceeded the average of such ratios at all banks at the end of the year preceding failure. Not all agricultural banks are rural banks. 3/ A failed bank is classified as rural if it was headquartered in a nonmetropolitan county.

The ERS forecasting model correctly identified 88 percent of the 200 banks that failed in 1987, but incorrectly predicted 12 percent of surviving banks as failures. Those with high forecast failure probabilities that did not fail are at risk in subsequent years.

A bank's probability of failure in a calendar year is predicted from eight bank-level financial ratios reported the previous June, two indicators of regulators' reluctance to move against large banks and those affiliated with multibank-holding companies, and the bank's home-county dependence on the oil and gas sector.

The "narrower but deeper" diagnosis comes from the drop in the number of banks vulnerable to failure (from 1,760 in 1987 to 1,534 in 1988), coupled with the rising average asset size of the vulnerable banks (from $63.5 million to $103.1 million). Only 35 percent of vulnerable banks are agricultural in 1988, down from 41 percent last year.

The proportion of vulnerable banks headquartered in farm-dependent counties has decreased from 28 to 26 percent. Yet vulnerable banks headquartered in counties dependent on the oil and gas sector rose to almost 40 percent of all vulnerable banks in 1988. Now, only 12 percent of all agricultural banks are vulnerable to failure, but 23 percent of the 2,649 banks in energy-dependent counties face above-average probabilities of failure.

As a result, agricultural bank failures are forecast to be down somewhat in 1988. This reflects the improvement in the financial condition of the farm sector, although there is still a substantial number of weak farm banks.

Bank failures are forecast to be concentrated in Texas, Oklahoma, and Louisiana, reflecting the ongoing depression in energy-dependent areas. These three States account for over half of the energy-dependent counties in the United States. All forecasts are contingent on maintaining current macroeconomic growth as well as stable to improving farm and energy sectors.

What It Means for Monetary Policy...

While continuing bank failures are alarming, most U.S. banks can cope with their bad loans and get on a more solid footing given a favorable economic climate. However, a recession would increase loan defaults as borrowers lost their ability to repay, and would likely push bank failures above the projections given here.

In anticipation of a possible slowdown in the economy, the Federal Reserve Board loosened the money supply earlier this year. This decreased interest rates and provided banks with a more profitable environment. Lower interest rates widen the spread between the rates banks must pay for deposits and the rates they receive on loans.

Bank Failures in 1987, and Banks Forecast as Vulnerable in 1987 & 1988

	Total banks 1/	Ag. banks 2/	Banks in oil- & gas-dependent counties 3/	Banks in farm counties 4/	Banks affil. w/multi-bank holding companies
1987 actual bank population					
Number	13,719	4,656	2,649	3,256	4,198
Percent of pop.	100.0	33.9	19.3	23.7	30.6
Avg. assets 5/ ($ mil.)	$209	$32	$97	$35	$497
1987 actual bank failures					
Number	200	75	89	45	28
Percent of pop.	1.5	1.6	3.4	1.4	0.7
Percent of fails	100.0	37.5	44.5	22.5	14.0
Avg. assets 6/ ($ mil.)	$50	$18	$50	$17	$103
1987 vulnerable banks, ERS forecast 7/					
Number	1,760	717	665	497	288
Percent of pop.	12.8	15.4	25.1	15.3	6.9
Percent of vuln.	100.0	40.7	37.8	28.2	16.4
Avg. assets 6/ ($ mil.)	$63.5	$26.4	$57.4	$25.1	$134.4
1988 vulnerable banks, ERS forecast					
Number	1,534	543	609	392	280
Percent of pop.	11.2	11.7	23.0	12.0	6.7
Percent of vuln.	100.0	35.4	39.7	25.6	18.3
Avg. assets 5/ ($ mil.)	$103.1	$25.3	$68.9	$25.8	$249.0

1/ Excludes banks headquartered in Alaska, Hawaii, U.S. possessions and territories, or reporting zero loans, assets, or deposits on June 30, 1987. 2/ Agricultural banks are those reporting farm loan concentrations above the unweighted average at all banks on the date specified. 3/ Oil- and gas-dependent counties are those where oil and gas sector earnings accounted for more than 1.85 percent of total county earnings in 1982, the average for all counties. 4/ Farm-dependent counties are those where farm sector earnings accounted for more than 5.3 percent of total county earnings in 1982, the average for all counties. 5/ As of June 1987. 6/ As of June 1986. 7/ Vulnerable banks include all those with forecast failure probabilities during the year greater than 0.98 percent, the approximate average failure probability in 1986. Forecast failure probabilities are computed for each bank, and are based on bank-level financial data reported for the previous June and the dependency of the bank's home county on the oil and gas sector in 1982.

A tightening of the money supply in response to a stronger-than-expected economy and concerns about renewed inflation would pressure banks by pushing interest rates up. Deposits would cost more, but the rates that banks earn on their loans would stay the same.

More important, higher rates would mean a higher risk of recession. And the subsequent rise in loan defaults would push many weak banks over the edge. Protecting the safety and soundness of the banking system is an additional incentive not to err on the side of tightness.

...And for Agricultural Credit

Agricultural and rural banks are now awash in deposits, and many are aggressively seeking new farm customers. In areas where bank failures are concentrated, however, surviving healthy banks may restrict credit to improve their liquidity. In such areas, farmers may experience difficulties securing new loans.

A highly liquid position enables a bank easily to meet sudden withdrawals by nervous depositors. Also, a liquid position is reassuring to depositors, reducing the chances they would suddenly demand their funds. In the presence of Federal deposit insurance, however, such credit-limiting effects are unlikely.

As the number of very weak banks allowed to remain open rises, another effect comes into play. Banks with little equity left to lose have strong incentives to gamble for recovery by making high-risk, potentially high-return loans. The weak banks are protected from depositors' fears by Federal deposit insurance, and do not pay more for the insurance coverage when they increase their risk exposure.

As a result, high-risk farm borrowers may find it easier to secure new credit from weak banks provided the borrowers are willing to pay high interest rates. Less risky farm borrowers, however, may have trouble getting loans at market interest rates from these weakened institutions. *[Gregory Gajewski (202) 786-1893]*

Resources

LAND VALUES RISE 3 PERCENT

After going down for 6 years, U.S. farmland values averaged higher this year. The February 1988 value averaged $564 per acre, 3 percent above a year earlier but still 31 percent below the record for nominal value, $823 in 1982. With inflation running at about 4 percent, the 1988 real value is down 1 percent from 1987, and down nearly 48 percent from the record for real value in 1980.

Farmland values were boosted as U.S. farm income set a record in 1987 and the farm financial difficulties of the early 1980's continued to mend. Farm real estate debt continued to fall; 1987 debt was about 20 percent below the 1983 peak. Improved farm income and lower farm debt reduced the ratios of debt to equity and debt to net cash income in both 1986 and 1987.

Interest rates on farm real estate loans averaged lower in 1987 than in 1986, but rates edged slightly upward late in the year. The Conservation Reserve Program strengthened prices for lower quality cropland in some areas.

Except for the West, most regional values were higher in 1988. Northeast farmland values, up 9 percent from 1987, continued the steady increase they have shown since the mid-1940's, mainly because of nonagricultural influences.

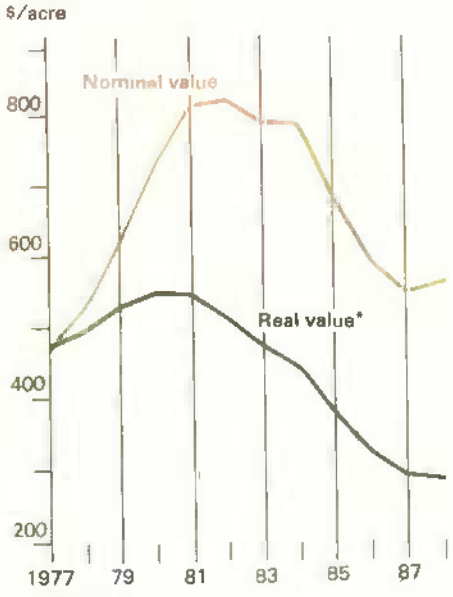
Strong gains also occurred in the Corn Belt (9 percent) and the Northern Plains (7 percent), the first increases since the early 1980's. Values were higher for all States in both regions.

Values also rose in the Lake States (7 percent), Appalachia (2 percent), and the Southeast (6 percent), while the Delta States' value was essentially unchanged from a year earlier.

Land values in most Western States continued downward into 1988. Regional values were down 3 percent in the Southern Plains, 2 percent in the Mountain States, and 2 percent in the Pacific region. But, the rates of decline were lower than in the past 2 years.

Cash rents for cropland and pasture were generally higher in 1988, especially for cropland in the Corn Belt and Northern Plains. But, the percentage of cash rent to land value dropped off in many States, as value increases during 1987-88 outpaced rent increases. *[Roger Hexem (202) 786-1419]*

Nominal Farmland Value
Up 3 Percent in 1988



*In 1977 dollars.

PENDING BILLS ON GROUNDWATER

The March Agricultural Outlook *contained a spreadsheet describing major environmental legislation—current and proposed—that may affect agriculture. The following article gives further details on one major issue, groundwater legislation.—Ed.*

Bills pending in Congress vary in their approach to protecting groundwater. A few bills emphasize regulation. Many stress prevention through research, development, and demonstration. Still others propose incentives, or emphasize State and local government participation.

Regulation Is a Frequent Proposal

Regulation to protect groundwater takes two forms: (1) restrictions on pesticide use and changes in pesticide registration requirements through amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), or (2) requirements to use management practices that control sources of contamination.

Amendments to FIFRA appear in proposals by Sen. David F. Durenberger and Rep. James L. Oberstar (S. 1419 and H.R. 3174), Rep. E. de la Garza (H.R. 2463), and Sen. Patrick J. Leahy (S. 1516).

Criteria for identifying "leachers"—pesticides that have the potential to leach into the groundwater—would be established and administered by the Environmental Protection Agency (EPA) according to the Durenberger/Oberstar and de la Garza proposals. If groundwater residue guidance levels for potential leachers were exceeded in a few well samples, a coordinated Federal and State regulatory response would be triggered.

The EPA administrator could amend the registration of a pesticide by limiting use at certain locations, or take any other action to enforce the groundwater residue guidance level. Pesticides could be banned nationally. The Durenberger/Oberstar proposal has lower groundwater residue guidance levels and stronger Federal regulatory provisions than the de la Garza bill, and treats potential drinking water much the same as water currently used for drinking.

In the de la Garza and Leahy proposals, materials that may result in "residues of potential toxicological concern in potable groundwater, edible fish and shellfish" are given priority in the FIFRA reregistration process. The Leahy bill broadly focuses on reducing environmental risks, while the de la Garza bill is directed at groundwater.

Regulation of a different nature appears in a second, comprehensive groundwater protection act (S. 2091) also proposed by Durenberger. The proposal would require the use of management practices to control contamination from pesticide and fertilizer application and from irrigation practices.

R & D and Demonstration Are Second Approach

Provisions for research, development, and demonstration programs to protect groundwater range from the establishment of task forces, committees, panels, and training programs, to setting up research programs.

Research programs would identify practices to control potential sources of groundwater contamination, and would assess the human health effects of potential contaminants. Some of the bills with research provisions are general, not identifying any specific industry as a potential source of contamination.

For example, Rep. James Scheuer's bill (H.R. 2253) does not mention specific potential sources of contamination. Under this proposal, the EPA would use groundwater research funds to develop controlling practices and assess health effects.

Other bills name sources of contamination to be researched and, thereby, set out roles for agencies other than EPA. A proposal by Rep. Thomas S. Foley (H.R. 3676) would appropriate funds to the Secretary of Agriculture to examine the relationship between agricultural practices and water use and quality.

A task force on best management practices for agricultural nitrogen would be established under the Foley bill. The task force would develop and demonstrate practices to mitigate "any negative effects of agricultural nitrogen and environmental nitrogen on water quality." Bills by Durenberger (S. 513), Sen. David Karnes (S. 1696), and Sen. Quentin N. Burdick and Rep. Arlan Stangeland (S. 1767 and H.R. 3069) propose a similar task force.

The provisions of Foley's bill were included by amendment in H.R. 791, a bill originally introduced by Rep. Samuel Gejdenson. The amended bill recently passed the House.

Research programs dealing with agricultural management of chemicals are included in Durenberger's S. 2091 and a proposal by Burdick (S. 1105). These two bills specify $6 million per year from fiscal 1988 through 1992 for the USDA's Agricultural Research Service to examine the impact of agricultural practices on groundwater quality. Also, the two bills would appropriate $3.5 million per year in fiscal 1988 and 1989 to the Secretary of Agriculture for nitrogen management research.

Incentives Can Encourage Groundwater Protection

Several bills propose to protect groundwater by providing incentives to farmers. Sen. Sam Nunn and Rep. Charles Hatcher (S. 1521 and H.R. 3357) and Sen. Robert Dole and Rep. Pat Roberts (S. 2045 and H.R. 4137) propose to capitalize on the positive impacts that taking land out of production can have on the environment, including improved groundwater quantity and quality.

Provisions of Groundwater Protection Bills Having Implications for Agriculture

Bills	Regulation	----Research, development, & demonstration--- Task force, advisory committee/ panel, information management	Training Programs	Contamination source control & health effects research	Research provision for USDA to examine contamination from agriculture	---Incentives--- Acreage reserve program	Water project/ groundwater resources link	State & local government participation (grants, roles)
Leahy (S. 1516)	X	X						
de la Garza (H.R. 2463)	X	X	X					X
Durenberger (S. 1419)	X	X						X
Oberstar (H.R. 3174)	X	X						X
Durenberger (S. 513)		X	X	X				X
Gejdenson with Foley amendments (H.R. 791)		X	X	X	X		X	X
Burdick (S. 1105)		X		X	X			X
Karnes (S. 1696)		X						
Burdick (S. 1767)		X						
Durenberger (S. 2091)	X	X	X	X	X	X		X
Scheuer (H.R. 2253)		X	X					X
Stangeland (H.R. 3069)		X						
Foley (H.R. 3676)		X	X	X	X		X	X
Nunn (S. 1521)						X		
Hatcher (H.R. 3357)						X		
Lugar (S. 1906)						X		
Dole (S. 2045)						X		
Roberts (H.R. 4137)						X		
Miller (H.R. 2320)							X	X
Moynihan (S. 20)		X						X
Bustamante (H.R. 963)		X						X
Heinz (S. 1992)		X						X

Nunn and Hatcher propose to increase the existing Conservation Reserve Program from 45 to 65 million acres, and make land that is contributing to groundwater problems eligible for enrollment through a pilot program.

Dole's proposal would increase the CRP to 50 million acres, but would then establish an Environmental Conservation Acreage Reserve Program of up to 20 million acres to protect natural resources. The additional reserve would enroll lands where ground and surface water quality, soil damage, soil salinity, siltation, selenium, and pesticide problems result from common agricultural management practices.

Incentives for States to manage groundwater through a link with irrigation water projects constructed by the Bureau of Reclamation are proposed by Rep. George Miller (H.R. 2320). This bill requires that the 17 Western States that are served by Bureau of Reclamation water projects and have significant groundwater problems develop an adequate groundwater management program. If the Secretary of the Interior determines that a reclamation State's program is inadequate, then Federal funding for the planning or construction of reclamation projects would cease, and reclamation contracts within the State would not be executed.

State and Local Participation Is Increasing

State and local governments are becoming a major source of groundwater legislation and groundwater protection strategies. For example, under California's Proposition 65, civil action may be brought and civil penalties levied against any "person who in the course of doing business knowingly discharges or releases a chemical known to the State to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water." Massachusetts recently proposed to ban alachlor, a widely used herbicide.

Although many Federal groundwater protection bills would provide grants to State and local governments, some place greater emphasis on their roles than others. Proposals by Sen. Daniel Moynihan and Rep. Albert G. Bustamante (S. 20 and H.R. 963) would provide that States develop management strategies for groundwater resources in accordance with federally established guidelines. Durenberger's S. 2091 also proposes a major role for State and local governments in protecting groundwater resources.

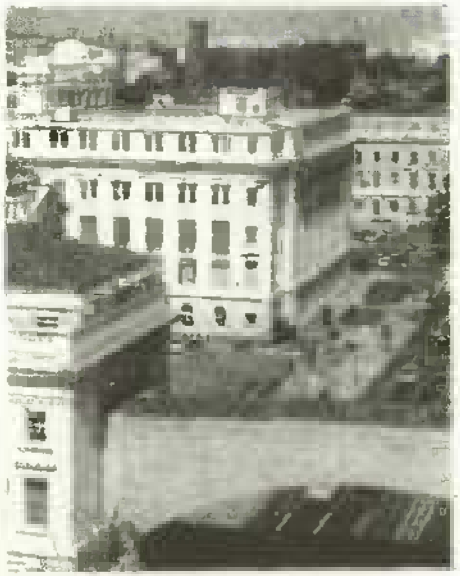
State and local government participation in forming the direction of Federal agencies' groundwater research would be ensured under a proposal by Sen. John Heinz (S. 1992). The bill would establish an advisory committee of not more than 11 State and local Government officials. *[John J. Hanchar (202) 786-1411 and Clayton W. Ogg (202) 786-1411]*

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the June *Agricultural Outlook* comes off press.

May

2 Egg products
3 Poultry Slaughter
6 Celery
Dairy Products
Dairy Products-Annual
9 Vegetables
10 Crop Production
13 Turkey Hatchery
Milk-Prod., Disp., & Income
Farm Labor
16 Cattle on Feed
Milk Production
Potato Stocks
18 Sugar Market Statistics
20 Livestock Slaughter
Catfish
Cold Storage
23 Eggs, Chickens, & Turkeys
27 Peanut Stocks & Processing
31 Agricultural Prices



Recent Publications

The following reports are available FOR SALE ONLY from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Order by report title and number. Make checks payable to Superintendent of Documents. Prices subject to change. Bulk discounts available. For faster service or further information call GPO's order desk at (202) 783-3238 and charge your purchase to your VISA, MasterCard, Choice, or GPO Deposit Account.

The Agricultural Work Force of 1985: A Statistical Profile, AER-582. (Price $1.75.) Stock Number 001-019-00568-8.

Ethanol: Economic and Policy Tradeoffs, AER-585. (Price $3.00.) Stock Number 001-019 00577-7.

Farm Drainage in the United States: History, Status, and Prospects, MP-1455. (Price $9.00.) Stock Number 001-019-00518-1.

Agricultural Statistics of the People's Republic of China, 1949-86, SB-764. (Price $8.50.) Stock Number 001-019-00583-1.

Weather in U.S. Agriculture: Monthly Temperature and Precipitation by State and Farm Production Region, 1950-86, SB-765. (Price $11.00.) Stock Number 001-019-00578-5.

Soviets Harvest Another Good Grain Crop, Yet Imports Continue High

The Soviets produced 211.3 million tons of food and feed grains in 1987. This total was only about 1 percent above 1986, but it marked the first time ever that two consecutive crops over 200 million tons have been harvested. The yield moved back up near the 1960-80 trend, averaging 1.83 tons per hectare, second only to the record 1.85 tons in 1978.

Bad weather, however, hurt crop quality. Soviet grain output is reported on a bunkerweight basis; it is not discounted for excess moisture and foreign materials. Many view this method of measuring as encouraging poor quality grain.

Declining for the seventh successive year, total grain area was an estimated 115.5 million hectares, the smallest in 27 years. Increased fallow and roughage area, combined with above-average winterkill, accounted for the drop.

Wheat production and quality were down measurably in 1987. Production was an estimated 13 percent below 1986's 92.3 million tons. Unusual dryness in the autumn of 1986, and extreme temperature fluctuations in January, left winter wheat area at its lowest since 1960. In addition, the quality of the spring wheat crop suffered in northern Kazakhstan and West Siberia from rain throughout harvesting operations and from inadequate grain-drying facilities.

Coarse grain production, on the other hand, rose a projected 9 percent to nearly 116 million tons, the highest recorded. Again, though, quality was down because of harvesting difficulties and high moisture.

Spring barley was reseeded in lost winter grain areas and benefited from a cool, wet spring. Barley output increased by an estimated 19 percent. Production of corn rose 19 percent above the dismal 1986 crop, for the largest outturn in 25 years. The good performance was largely attributable to expanded area.

1988 Winter Grain Crop Off to Good Start

The 1988 Soviet winter grain crop (winter wheat, rye, and barley) was sown on an estimated 32.5 million hectares. To date, prospects for the crop appear brighter than last year. Winterkill of grains is estimated below the average of 18 percent, and well below the roughly 30 percent lost last year. Conditions in the autumn of 1987 were more favorable for the emergence and establishment of crops prior to entering dormancy.

Winter grains benefited from near-normal temperatures in most regions this season, in contrast to the extreme fluctuations and extended periods of severe cold in the winter of 1986/87. Snowcover was adequate, and moisture supplies, while below average, are well above a year ago.

A concern of Soviet farmers in the New Lands this spring is the lack of high quality seed for spring grain. The quality of seed stocks was below average in the areas with harvesting problems last year—the Urals region, the Volga region, northern Kazakhstan, West Siberia, and the Non-Black Soil Zone.

Despite the substantial shortfall from planned production last year, the Soviet target for grain production in 1988 is set at 235 million tons. This total is unrealistic, even though it is only 2 million tons above the 1987 goal. Soviet plans continue to call for unlikely grain output goals of 250-255 million tons by 1990 and 260-280 million by 1995.

Intensive Technology: Part of Strategy To Raise Production

An "Intensive Technology Program" is a major part of the Soviet strategy to boost grain output. Intensive technology means use of more and better quality fertilizers, pesticides, seed, and farm equipment, and their concentration on the best soils.

Soviet Imports of U.S. Grain & Soybeans During the 5-Year LTGA 1/

	83/ 84	84/ 85	85/ 86	86/ 87	87/ 88 2/
	Million tons				
Total grain	14.07	18.64	6.96	8.17	12.91
Wheat	7.59	2.89	0.15	4.07	8.81
Corn	6.48	15.75	6.81	4.10	4.10
Soybeans	.42	--	1.52	.07	.82
Soybean meal	--	--	--	--	1.30

1/ The Long-Term Grain Agreement covers the years 1983/84-1987/88 (Oct. 1-Sept. 30). 2/ Data received as of April 15, 1988. Figures reflect quantities contracted, not necessarily quantities shipped.

A major component of intensive technology is more chemical fertilizers and better coordination of their application. In 1986, almost 73 percent of the small grain area was fertilized, a record. The application rate for this area reached 86 kilograms per hectare, almost 20 percent over 1985 and up nearly 70 percent from 1980. The rise in 1986 was the largest in at least a decade.

Moreover, the fertilizers, which have often benefited mainly weeds, have been increasingly supplemented by herbicides and other plant protection agents (PPA). To compensate for lower quality domestically produced PPA's, emphasis has been placed on imports of more potent chemicals from the West.

In both 1985 and 1986, not only were total PPA imports above average, but the share of them coming from the West rose significantly. Winter grains appear to have been the prime beneficiaries of intensive technology, with spring grains showing less impact.

By 1990, intensive technology is planned to encompass as much as 50 million hectares, despite the fact that constraints to broadening the program are already appearing in its slowing rate of expansion. While intensive technology area rose about 10 million hectares in 1986, from nearly 19 million in 1985, the increase slowed to about 6 million hectares in 1987 and is planned to be only 4 million in 1988.

Furthermore, the additional grain production from intensive technology in 1987 was a reported 25 million tons, only 1 million more than in 1986. This is in spite of a reported 20-percent increase from 1986 in the area under the program.

Can the Soviets Become Self-Sufficient in Food Wheat?

The Soviets continue to have difficulties (many related to both climate and geography) in producing milling-quality wheat. Their problems persist despite plans calling for self-sufficiency in food grains, and despite wheat production twice the size of food needs.

A number of policy innovations adopted in the last 3 years show the priority put on domestic production of bread-quality wheat. Wheat areas have been top targets for intensive technology. In June 1985, just months after General Secretary Gorbachev assumed leadership, producer prices for milling-quality wheat were raised significantly.

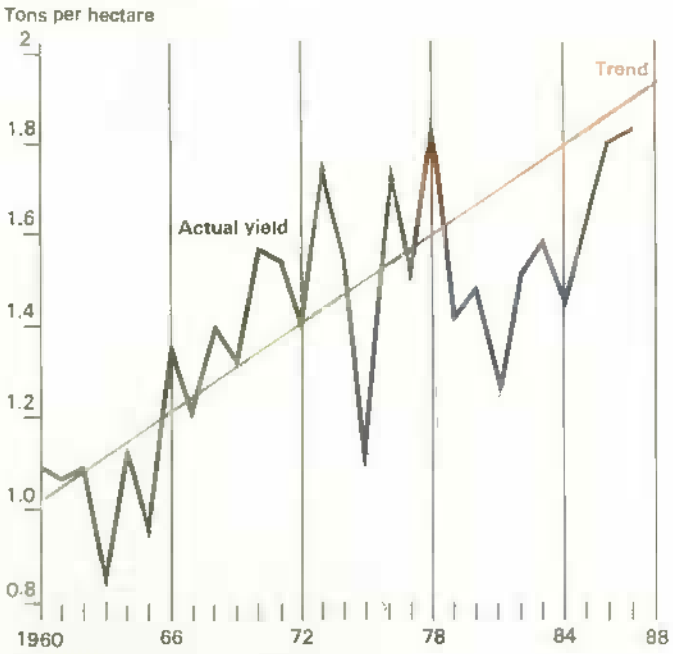
The incentives remained in 1986 and farms were entitled to above-plan bonuses for Durum wheat, even if the procurement targets for other types of grain were not met. Furthermore, changes in grading standards for wheat took effect in 1986. The new regulations specified that discoloration and low test weights no longer disqualified wheat if gluten and protein content requirements were met.

Despite these efforts, the Soviets continue to face shortfalls of high-quality wheat. For example, even though about 60 percent of intensive technology on spring grains was concentrated on wheat areas in 1987, both the production and quality of wheat fell. In 1986, procurements of quality hard and Durum wheat—as defined by the Soviets—reached over 30 million tons, about 16 million above the 1981-85 average. But quality wheat procurements in 1987 are estimated to have slipped closer to the 21 million tons purchased in 1985.

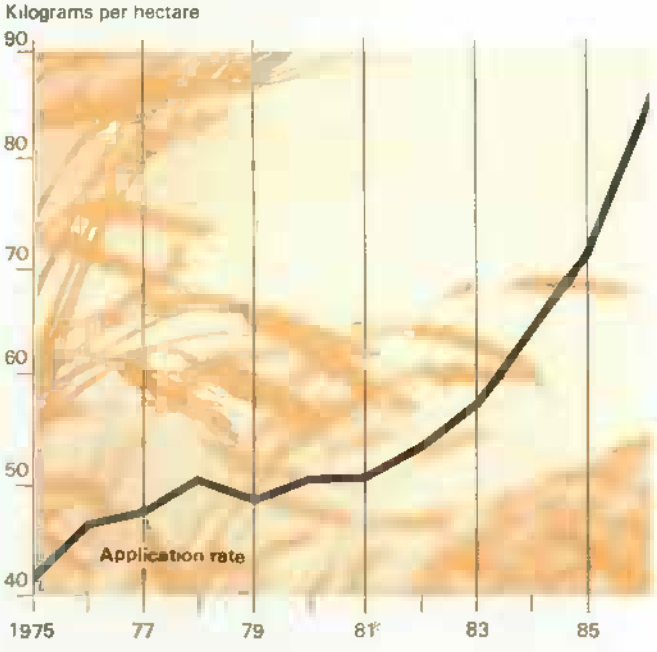
EEP Produces Surge in U.S. Wheat Sales to Soviets

Total Soviet grain imports in the 1987/88 (July-June) marketing year are projected to be the highest in 3 years, despite the size of the 1987 Soviet grain crop. Grain imports are forecast

Soviet Grain Yield Returning to Trend



USSR Ups Fertilizer Use on Small Grains



about 16 percent above the estimated 28.5 million tons imported in 1986/87, primarily because of larger wheat purchases.

Partly because of the reduced size and quality of the 1987 Soviet wheat crop and the continued availability of low-priced quality wheat, Soviet wheat imports in 1987/88 (July-June) are estimated at the second highest figure ever, 22 million tons. Aided by the Export Enhancement Program and Soviet demand for milling-quality wheat, the U.S. share in 1987/88 is forecast to rise almost tenfold from 1986/87 to about half of total Soviet wheat purchases. In 1985/86, the U.S. share was less than 1 percent.

As a result of the increased U.S. sales, the USSR is expected to be the top importer of U.S. wheat in 1987/88, above Japan, Egypt, and South Korea, traditionally the primary U.S. customers.

More competitive U.S. prices, due to the EEP and the fall in the dollar, greatly increased the attractiveness of both new- and old-crop U.S. wheat. After rejecting a 4-million-ton EEP offer made in August 1986, reportedly because they were not satisfied with the $13-per-ton bonus, the Soviets purchased the entire 4-million-ton EEP offer announced by USDA in April 1987.

U.S. wheat sales under this offer were made at a weighted average bonus of $41.52 per ton. The offer induced the Soviets to meet the minimum wheat purchase requirement of the fourth year of the Long-Term Grain Agreement (LTGA).

In November 1987, two additional EEP offers, totaling 4.75 million tons, were announced; the Soviets contracted for them soon thereafter. EEP bonuses on these sales averaged $37.33 per ton. Additional EEP offers totaling 4 million tons were announced by USDA in January, March, and April 1988.

The expected increase in the U.S. share of Soviet wheat imports in 1987/88 likely will be at the expense of the other primary suppliers—Canada, the EC, Argentina, and Australia.

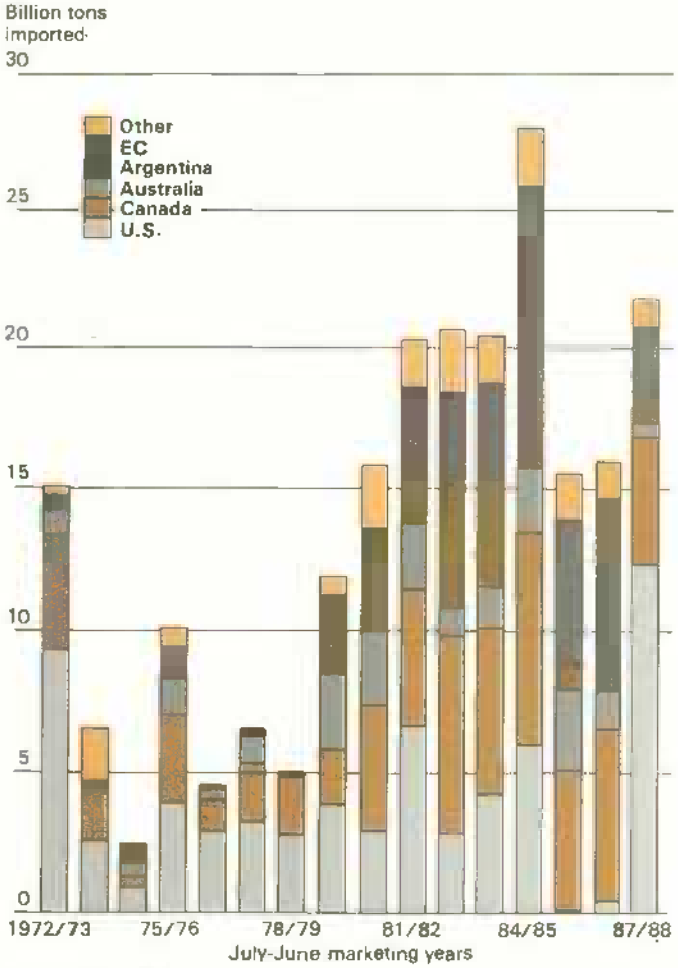
New U.S.-USSR Grain Agreement Under Negotiation

This March, negotiations began on a third U.S.-USSR Long-Term Grain Agreement, expected to take effect on October 1, 1988. The first LTGA was for 1976/77-1980/81 (October-September), and was later extended for 2 years. The second LTGA, signed in August 1983, was for 1983/84-1987/88.

The USSR has already fulfilled this year's minimum of 4 million tons of U.S. wheat, 4 million tons of corn, and 1 million of any combination of wheat, corn, and soybeans/meal (where 1 ton of soybeans equals 2 tons of grain). As of April 15, Soviet purchases under the fifth and last year covered by the LTGA included 8.8 million tons of wheat, 4.1 million of corn, 818,000 of soybeans, and a record 1.3 million tons of soybean meal.

The Soviets have not always complied with the LTGA, however, falling short of the minimum in 3 of the last 4 years. In 1984/85 (October-September) and 1985/86, Soviet purchases of wheat were below minimum requirements, and in 1986/87 the overall 9-million-ton minimum was not met. The Soviets claim that overpriced U.S. wheat was the primary reason for their refusal to make the minimum purchase. *[Christian J. Foster (202) 786-1620]*

U.S. Regains Big Share of Soviet Wheat Imports



1978/88 forecast

U.S. EEP Wheat Offers to the USSR

Year*	Month offered	Quantity	Standing
1985/86	Aug.	4.00 mil. tons	Expired
1986/87	Apr.	4.00 mil. tons	Complete
1987/88	Oct.	0.065 mil. tons	Complete
	Nov.	2.40 mil. tons	Complete
	Nov.	2.35 mil. tons	Complete
	Jan.	2.00 mil. tons	Complete
	Mar.	1.00 mil. tons	Complete
	Apr.	1.00 mil. tons	Complete

*U.S.-USSR LTGA year October 1-September 31.

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1987				1988				
	II	III	IV	Annual	I	II F	III F	IV F	Annual F
Prices received by farmers (1977=100)	128	128	129	127	130	128	126	--	121
Livestock & products	149	150	144	146	148	142	140	--	142
Crops	106	105	113	106	111	113	110	--	111
Prices paid by farmers, (1977=100)									
Prod. items	147	148	150	147	152	154	153	--	153
Commodities & services, int., taxes, & wages	162	164	165	162	165	169	169	--	168
Cash receipts ($ bil) 1/	130	139	136	134	145	132	140	132	134-139
Livestock ($ bil)	73	78	75	74	73	70	75	72	71-74
Crops ($ bil)	58	60	61	59	72	63	65	60	64-67
Market basket (1967=100)									
Retail cost	303	305	306	303	--	--	--	--	--
Farm value	245	245	235	240	--	--	--	--	--
Spread	336	341	347	340	--	--	--	--	--
Farm value/retail cost (%)	30	30	30	30	--	--	--	--	--
Retail prices (1982-84=100)									
Food	113	114	114	114	115	116	116	117	116
At home	112	112	112	112	113	114	114	114	114
Away-from home	116	118	119	117	119	121	122	123	121
Agricultural exports ($ bil) 2/	6.5	6.9	8.5	27.9	8.7	7.7	7.6	9.0	32.5
Agricultural imports ($ bil) 2/	5.3	4.8	5.2	20.6	5.5	5.0	4.8	5.0	20.5
Production *									
Red meat (mil lb)	9,240	9,624	10,096	38,442	9,684	9,418	9,553	9,617	38,272
Poultry (mil lb)	4,932	5,193	5,112	19,770	4,940	5,310	5,440	5,230	20,920
Eggs (mil doz)	1,438	1,439	1,479	5,797	1,465	1,435	1,415	1,465	5,780
Milk (bil lb)	37.4	35.5	34.7	142.5	36.2	38.2	36.4	35.2	146.0
Consumption, per capita:									
Red meat and poultry (lb)	52.5	53.8	56.8	215.0	53.8	54.5	54.9	56.3	219.5
Corn beginning stocks (mil bu) 3/	8,248.2	6,332.2	4,881.7	4,881.7	8,768.5	7,361.5	--	--	--
Corn use (mil bu) 3/	1,916.5	1,451.0	2,177.9	7,409.8	2,137.6	--	--	--	--
Prices: 4/									
Choice steers--Omaha ($/cwt)	68.50	65.04	64.31	64.60	68.33	66-70	63-69	64-70	64-70
Barrows and gilts--7 mkts. ($/cwt)	56.18	58.97	43.51	51.69	44.75	45-48	44-50	40-46	42-48
Broilers--12-city (cts/lb)	48.2	48.7	42.5	47.4	45.4	45-49	44-50	40-46	43-49
Eggs--NY Gr. A large (cts/doz)	58.9	63.5	59.2	61.6	55.0	50-54	58-64	63-69	56-62
Milk--all at plant ($/cwt)	12.07	12.33	12.83	12.53	12.27	11.00-11.60	11.35-12.05	11.95-12.65	11.50-12.10
Wheat--Kansas City HRW ($/bu)	2.94	2.65	2.86	2.72	3.20	--	--	--	--
Corn--Chicago ($/bu)	1.82	1.68	1.74	1.64	1.95	--	--	--	--
Soybeans--Chicago ($/bu)	5.37	5.16	5.36	5.19	6.14	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	64.7	73.5	63.7	64.3	59.1	--	--	--	--

	1980	1981	1982	1983	1984	1985	1986	1987 P	1988 F
Gross cash income ($ bil)	143.3	146.0	150.6	150.4	155.1	156.9	152.0	156	158-159
Gross cash expenses ($ bil)	109.1	113.2	112.5	113.3	116.3	109.6	100.1	99	100-104
Net cash income ($ bil)	34.2	32.8	38.1	37.1	38.8	47.3	52.0	57	50-55
Net farm income ($ bil)	16.1	26.9	23.5	12.7	32.0	32.3	37.5	45	40-45
Farm real estate values (1977=100) 5/	145	158	157	148	146	128	112	103	106

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. P = preliminary. F = forecast. * = commercial production.

Table 2.—U.S. Gross National Product & Related Data

	Annual			1986	1987			
	1985	1986	1987 R	IV	I	II	III	IV R
	$ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,010.3	4,235.0	4,488.5	4,288.1	4,377.7	4,445.1	4,524.0	4,607.4
Personal consumption expenditures	2,629.4	2,799.8	2,967.8	2,858.6	2,893.8	2,943.7	3,011.3	3,027.6
Durable goods	368.7	402.4	413.7	419.8	396.1	409.0	436.8	413.0
Nondurable goods	913.1	939.4	982.9	946.3	969.9	982.1	986.4	993.1
Clothing & shoes	157.2	167.5	177.0	169.6	174.0	175.8	178.7	179.6
Food & beverages	472.8	497.8	515.8	507.5	514.8	515.0	514.0	519.3
Services	1,347.5	1,458.0	1,571.2	1,492.4	1,527.7	1,552.6	1,588.1	1,616.5
Gross private domestic investment	641.6	671.0	717.5	660.2	699.9	702.6	707.4	760.2
Fixed investment	631.6	655.2	671.5	666.6	648.2	662.3	684.5	690.8
Change in business inventories	10.0	15.7	46.1	-6.4	51.6	40.3	22.9	69.4
Net exports of goods & services	-79.2	-105.5	-119.6	-116.9	-112.2	-118.4	-123.7	-124.3
Government purchases of goods & services	818.6	869.7	922.8	886.3	896.2	917.1	929.0	948.8
	1982 $ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	3,607.5	3,713.3	3,821.0	3,731.5	3,772.2	3,795.3	3,835.9	3,880.8
Personal consumption expenditures	2,352.6	2,450.5	2,497.2	2,480.5	2,475.9	2,487.5	2,520.7	2,504.6
Durable goods	352.7	383.5	388.2	399.0	375.9	385.4	406.9	384.5
Nondurable goods	849.5	877.2	878.1	880.3	883.2	879.0	875.7	874.6
Clothing & shoes	147.9	158.0	159.5	158.4	160.4	157.3	161.7	158.6
Food & beverages	436.5	444.9	441.2	444.0	447.5	441.6	437.1	438.6
Services	1,150.4	1,189.8	1,230.9	1,201.1	1,216.9	1,223.1	1,238.1	1,245.6
Gross private domestic investment	636.1	654.0	687.6	631.0	671.8	673.7	681.9	723.1
Fixed investment	628.7	640.2	644.7	645.4	624.2	634.7	657.3	662.6
Change in business inventories	7.4	13.8	42.9	-14.4	47.6	39.0	24.6	60.5
Net exports of goods & services	-108.2	-145.8	-135.5	-151.8	-135.2	-132.7	-138.4	-135.8
Government purchases of goods & services	726.9	754.5	771.7	771.8	759.6	766.7	771.7	788.9
GNP implicit price deflator % change	3.2	2.9	3.0	.7	4.2	3.5	2.8	2.7
Disposable personal income ($ bil)	2,841.1	3,022.1	3,181.7	3,061.6	3,125.9	3,130.6	3,195.3	3,275.0
Disposable per. income (1982 $ bil)	2,542.2	2,645.1	2,677.2	2,656.7	2,674.6	2,645.5	2,674.7	2,713.8
Per capita disposable per. income ($)	11,872	12,508	13,050	12,626	12,865	12,858	13,080	13,384
Per capita dis. per. income (1982 $)	10,622	10,947	10,980	10,956	11,008	10,865	10,958	11,090
U.S. population, total, incl. military abroad (mil)	239.3	241.6	243.8	242.5	243.0	243.5	244.1	244.7
Civilian population (mil)	237.0	239.4	241.5	240.2	240.7	241.3	241.8	242.4

	Annual			1987			1988	
	1985	1986	1987 P	Feb	Nov	Dec	Jan	Feb
	Monthly data seasonally adjusted							
Industrial production (1977=100)	123.7	125.1	129.8	127.1	133.2	133.8	134.2	134.4
Leading economic indicators (1967=100)	168.6	179.3	189.8	186.0	190.3	191.0	188.9	190.6
Civilian employment (mil. persons)	107.2	109.6	112.4	111.3	113.5	113.7	114.1	114.4
Civilian unemployment rate (%)	7.2	7.0	6.2	6.6	5.9	5.8	5.8	5.7
Personal income ($ bil annual rate)	3,327.0	3,534.3	3,746.5	3,671.2	3,839.8	3,869.1	3,879.7	3,913.6
Money stock-M2 (daily avg) ($bil) 1/	2,569.5	2,807.8	2,807.8	2,603.3	2,782.7	2,807.8	2,926.3	2,948.4
Three-month Treasury bill rate (%)	7.48	5.98	5.82	5.59	5.81	5.80	5.90	5.69
Aaa corporate bond yield (Moody's) (%)	11.37	9.02	9.38	8.38	10.01	10.11	9.88	9.40
Housing starts (thou) 2/	1,742	1,805	1,621	1,809	1,661	1,399	1,372	1,484
Auto sales at retail, total (mil)	11.0	11.4	10.3	10.2	9.9	10.9	10.4	11.0
Business inventory/sales ratio	1.55	1.54	1.51	1.49	1.51	1.51	1.53	NA
Sales of all retail stores ($ bil)	115.0	121.2	125.5	124.2	126.0	127.5	127.3 P	128.0
Nondurable goods stores ($ bil)	71.8	73.8	76.8	76.9	77.2	77.6	77.0 P	76.9
Food stores ($ bil)	23.7	24.6	25.3	25.2	25.1	25.2	25.0 P	25.2
Eating & drinking places ($ bil)	11.1	12.1	12.7	13.1	12.7	13.0	12.9 P	12.9
Apparel & accessory stores ($ bil)	6.2	6.7	7.1	7.1	7.1	7.2	7.0 P	7.0

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. R = revised. NA = not available.

Information contact: James Malley (202) 786-1782.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986	1987	1988 P
	Annual Percent change										
Total Foreign											
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.9	2.7
CPI	10.2	14.0	16.9	15.6	14.4	18.4	22.5	21.6	11.4	16.6	25.2
Export earnings	27.5	14.6	22.2	-2.7	-7.0	-2.1	5.4	1.7	11.5	16.4	11.4
Developed less U.S.											
Real GNP	4.8	3.1	2.4	1.4	1.1	1.9	3.4	3.3	2.4	2.8	2.4
CPI	8.4	9.4	10.9	9.6	8.0	6.0	5.1	4.7	2.7	2.6	2.8
Export earnings	23.9	14.9	17.0	-3.3	-4.3	-0.5	6.2	4.9	18.2	17.0	12.9
Centrally planned											
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.5	3.8
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	6.7	7.7
Latin America											
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	2.3	1.2
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.1	179.4	86.1	139.1	231.5
Export earnings	28.1	12.8	30.1	5.3	-10.0	3.6	6.0	-6.2	-17.0	4.1	5.2
Africa & Middle East											
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.0	-1.2	0.1	1.7
CPI	8.7	16.4	24.6	17.3	12.9	16.7	19.4	11.2	12.0	14.9	12.7
Export earnings	49.6	43.2	37.9	-8.2	-19.7	-16.3	-7.7	-7.9	-26.6	9.0	10.2
Asia											
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	6.0	5.2
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.2	4.4	5.7	6.1
Export earnings	30.1	18.4	27.8	6.8	-0.3	3.5	13.4	-1.6	7.0	24.5	13.3

P = Preliminary.

Information contact: Timothy Baxter (202) 786-1688.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb R	Mar P
					1977=100					
Prices received										
All farm products	128	123	127	121	127	132	127	131	130	130
All crops	120	107	106	100	106	120	113	115	109	110
Food grains	133	109	102	101	108	113	114	116	120	114
Feed grains & hay	122	98	85	80	86	88	92	93	96	96
Feed grains	122	96	81	76	81	84	89	90	93	93
Cotton	93	91	98	78	106	107	106	100	94	94
Tobacco	153	138	130	127	137	137	137	134	134	134
Oil-bearing crops	84	77	79	75	79	83	86	87	89	89
Fruit, all	180	169	181	154	197	236	170	170	166	167
Fresh market 1/	192	177	191	158	211	259	178	178	174	174
Commercial vegetables	129	130	144	154	122	203	177	199	129	143
Fresh market	122	123	147	160	118	225	195	223	127	148
Potatoes & dry beans	124	114	127	126	95	93	89	93	94	99
Livestock & products	136	138	146	142	147	143	141	147	149	148
Meat animals	142	145	163	156	165	157	157	166	172	171
Dairy products	131	129	129	129	133	133	131	129	127	124
Poultry & eggs	119	128	108	111	99	105	98	101	95	101
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	163	159	162	--	165	--	--	165	--	--
Production items	151	144	147	--	150	--	--	152	--	--
Feed	116	108	103	--	105	--	--	112	--	--
Feeder livestock	154	153	179	--	190	--	--	193	--	--
Seed	153	148	148	--	149	--	--	149	--	--
Fertilizer	135	124	118	--	121	--	--	121	--	--
Agricultural chemicals	128	127	124	--	123	--	--	123	--	--
Fuels & energy	201	162	161	--	168	--	--	161	--	--
Farm & motor supplies	146	144	144	--	144	--	--	144	--	--
Autos & trucks	193	198	208	--	213	--	--	213	--	--
Tractors & self-propelled machinery	178	174	174	--	176	--	--	176	--	--
Other machinery	183	184	185	--	188	--	--	188	--	--
Building & fencing	136	136	137	--	138	--	--	138	--	--
Farm services & cash rent	150	150	146	--	146	--	--	150	--	--
Interest payable per acre on farm real estate debt	237	219	207	--	207	--	--	193	--	--
Taxes payable per acre on farm real estate	133	134	136	--	136	--	--	138	--	--
Wage rates (seasonally adjusted)	154	160	167	--	162	--	--	162	--	--
Production items, interest, taxes, & wage rates	157	150	152	--	155	--	--	155	--	--
Ratio, prices received to prices paid 2/	79	77	78	77	77	80	77	79	79	79
Prices received (1910-14=100)	585	561	578	555	580	601	582	599	592	592
Prices paid, etc. (Parity index) (1910-14=100)	1,120	1,096	1,115	--	1,132	--	--	1,138	--	--
Parity ratio (1910-14=100) 2/	52	51	52	--	51	53	51	52	--	--

1/ Fresh market for noncitrus: fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. R = revised. P = preliminary.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1987				1988		
	1985	1986	1987	Mar	Oct	Nov	Dec	Jan	Feb R	Mar P
Crops										
All wheat ($/bu)	3.20	2.71	2.55	2.57	2.62	2.69	2.70	2.75	2.79	2.64
Rice, rough ($/cwt)	7.85	5.04	4.49	3.62	5.68	7.09	7.37	7.70	8.97	8.46
Corn ($/bu)	2.49	1.96	1.56	1.47	1.56	1.62	1.72	1.77	1.83	1.84
Sorghum ($/cwt)	3.97	3.11	2.56	2.44	2.48	2.69	2.73	2.75	2.88	2.90
All hay, baled ($/ton)	69.90	61.60	63.00	59.20	65.10	62.10	65.00	62.80	65.50	66.20
Soybeans ($/bu)	5.42	5.00	5.07	4.73	5.04	5.36	5.63	5.73	5.97	5.93
Cotton, Upland (cts/lb)	56.1	54.8	59.4	47.5	64.1	64 9	64.2	60.6	56.8	56.9
Potatoes ($/cwt)	3.92	5.03	4.47	5.05	3.82	3.59	3.57	3.75	3.73	3.84
Lettuce ($/cwt)	10.90	11.90	14.80	15.00	13.30	42.20	34.80	35.60	11.10	21.30
Tomatoes ($/cwt)	24.10	25.10	25.10	32.10	26.80	45.80	22.60	31.50	19.40	22.00
Onions ($/cwt)	9.08	10.90	11.40	19.90	9.77	8.82	10.10	15.30	13.80	12.70
Dry edible beans ($/cwt)	17.60	19.01	15.50	18 60	14.60	14.00	13.10	13.40	14.40	16.20
Apples for fresh use (cts/lb)	17.3	19.1	NA	18 0	14.3	12.5	11.8	11.5	12 8	12.8
Pears for fresh use ($/ton)	349.00	372.00	217.00	363 00	196.00	211.00	147.00	135.00	193.00	219.00
Oranges, all uses ($/box) 2/	7.41	4.42	4.55	4.68	7.36	10.23	5.45	6.19	6.24	5.99
Grapefruit, all uses ($/box) 2/	4 01	4.29	5.00	2.64	5.07	6.81	5.84	5.34	5.25	4.86
Livestock										
Beef cattle ($/cwt)	54.00	52.80	61.40	59.30	62.90	62.00	62.20	65.40	67.40	68.40
Calves ($/cwt)	62.40	60.90	78.10	72.50	81.40	82.90	83.10	86.20	92.60	92.30
Hogs ($/cwt)	43.90	50.10	50.90	47.40	48.90	40.60	40.30	43.00	45 80	41.90
Lambs ($/cwt)	68.10	69.10	77.90	80.80	71.90	65.70	72.80	80.70	80.40	83.30
All milk, sold to plants ($/cwt)	12.70	12.50	12.50	12.50	12.90	12.90	12.70	12.50	12.30	12.00
Milk, manuf. grade ($/cwt)	11.78	11.55	11.40	11.30	11.80	11.70	11.60	11.30	11.00	10.80
Broilers (cts/lb)	30.1	34.5	28.5	29.1	25.2	26.4	24.6	27 1	25.7	27.5
Eggs (cts/doz) 3/	57.4	61.2	53.8	54.4	51 3	55.2	48.6	49.3	46.9	50.8
Turkeys (cts/lb)	47.2	44.4	34.2	37.6	29.9	33.7	38.1	31.8	29.0	28.2
Wool (cts/lb) 4/	63.3	66.8	91.7	78.7	87.2	86.5	86.2	75.2	93.3	118.0

1/ Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 4/ Average local market price, excluding incentive payments. R = revised. P = preliminary. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1987						1988	
	1987	Feb	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
					1982-84=100					
Consumer price index, all items	113.6	111.6	113.8	114 4	115.0	115.3	115.4	115 4	115.7	116.0
Consumer price index, less food	113.6	111.4	113.8	114.5	115.1	115.5	115.7	115.5	115.7	116.0
All food	113.5	112.5	113.7	113 8	114.1	114.3	114.2	114.7	115.7	115.7
Food away from home	117.0	115.5	117.2	117.5	118.0	118.3	118.6	118.9	119.3	119.7
Food at home	111 9	111.2	112.1	112.1	112.4	112.4	112.1	112.8	114.1	113.9
Meats 1/	109.6	106.3	111.7	112.1	112.0	111.8	111.1	110.4	110.1	110.2
Beef & veal	106.3	102.2	108.4	107.8	107.4	107.8	108.6	108.5	107.7	108.5
Pork	115.9	113.5	119.7	120.7	121.1	119.0	115.5	113.1	113.4	112.3
Poultry	112.6	116.4	111.0	112.9	112.5	111.8	107.9	107 8	108.9	108.4
Fish	129.9	127.1	129.7	130.8	132.0	131.4	132.3	133.3	137.2	137.0
Eggs	91.5	97.8	87.8	85.8	97.6	91.4	93.9	85.5	90.1	85.5
Dairy products 2/	105.9	105.9	105.3	105.7	106.4	106.9	106.9	106.7	107.4	107.3
Fats & oils 3/	108.1	107.4	108.4	108.3	107.8	107.4	108.0	107.7	108.5	109.5
Fresh fruit	132.0	130.7	133.9	131.8	131.7	135.7	125.8	126.3	130.7	132.6
Processed fruit	110.6	108.3	110.8	111.8	112.1	111.5	111.6	112.3	115.1	118.0
Fresh vegetables	121.6	123.2	121.0	114.5	114.6	112.5	121.2	140.2	143.9	133.7
Potatoes	116.0	111.7	139.1	127.6	110.5	101.9	100.6	103 8	104.6	106.2
Processed vegetables	107.1	105.0	107.7	107.9	107.6	107.5	107.3	107.3	107.2	107.6
Cereals & bakery products	114.8	113.3	115.2	115.3	115.4	115.6	116.2	116.8	118.1	118.7
Sugar & sweets	111.0	110.3	111.1	111.3	111.5	111.6	111.4	111.0	112.2	112.2
Beverages, nonalcoholic	107.5	111.3	105.9	105.9	105.8	106.7	105.0	104.8	106.9	107 7
Apparel commodities less footwear	109.6	104.8	105.7	108.3	112.9	115.2	115.0	111.7	109.0	108.8
Footwear	105.1	101.8	103.4	104.2	105.7	107.3	108.0	107.2	106.1	105.8
Tobacco & smoking products	133.6	130.8	135.0	135.3	135.9	136.3	136.5	137.0	140.8	142.2
Beverages, alcoholic	114.1	112.8	114.4	114.7	114.9	115.2	115 4	115.4	115.8	116.8

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ralph Parlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1987					1988	
	1985	1986	1987 P	Feb	Sept	Oct	Nov	Dec	Jan	Feb
					1982=100					
Finished goods 1/	104.7	103.2	105.4	104.1	105.7	106.2	106.2	105.7	106.2	105.9
Consumer foods	104.6	107.2	109.5	108.3	110.5	109.7	109.9	108.8	110.6	109.4
Fresh fruit	108.1	112.9	111.4	110.3	107.5	115.2	120.8	118.6	106.6	104.2
Fresh & dried vegetables	99.4	97.8	103.8	96.3	99.4	91.7	125.8	109.6	126.3	96.4
Dried fruit	88.7	91.9	95.0	94.0	94.2	94.6	97.9	99.0	99.1	97.8
Canned fruit & juice	113.8	111 0	115.4	113.5	116.4	116.4	116.4	117.2	119.1	119.4
Frozen fruit & juice	118.5	103.0	113.4	109.7	112.9	113.0	115.9	126.6	126.0	130.2
Fresh veg. excl. potatoes	100.3	99.3	99 0	91.9	98.2	89.6	135.4	112.0	135.9	96.8
Canned veg & juices	101.9	101.2	103.5	102 8	102.8	102.9	102.5	102.6	103.1	103.3
Frozen vegetables	106.5	106.6	107.3	107.6	107.7	107.2	106.5	106.7	106.8	106.5
Potatoes	101.2	104.0	120.5	118.4	110.6	106.8	108.5	114.2	107.5	100.2
Eggs	95.6	99 5	87.6	98.2	100.6	81.1	92.6	70.6	76.5	73.8
Bakery products	113.9	116.6	118.5	116.7	119.3	120.0	120.1	121.3	122.5	122.8
Meats	90.9	93.9	100.3	95.8	105.7	102.1	95.5	93.2	98.0	97.6
Beef & veal	90.3	88.1	95 4	90 9	96.7	95.0	92.0	92.5	96.1	96.3
Pork	89.1	99.9	104.7	98.1	119.2	110.0	95.1	87.1	97.3	95.7
Processed poultry	110.4	116.7	103.5	107.6	101.9	97.5	98.8	96.3	98.2	93.8
Fish	114.6	124.9	141.9	144.1	133.5	148.2	153.3	156.3	159.2	158.2
Dairy products	100.2	99.9	101.7	101.4	102.7	102.1	102.0	101.8	101.1	100.4
Processed fruits & vegetables	107.9	104 9	108.6	107.5	108.5	108.4	108.7	110.4	111.0	111.5
Shortening & cooking oils	123.9	103.3	104.0	102.3	104.3	105.3	106.8	109.1	116.2	114.4
Consumer finished goods less foods	103.3	98.4	100.6	102.8	101.1	101.9	101.8	101.4	101.3	101.3
Beverages, alcoholic	107.6	110.1	110.4	111.0	109.5	110.1	110.0	110.3	110.4	111.3
Soft drinks	107.7	109.5	111.9	110.8	112.0	112.8	112 7	112.6	112.9	113.3
Apparel	105.0	106.3	108.4	107 2	109.2	109.3	109.4	109.5	110.1	110.4
Footwear	104.7	106.8	109.4	107.5	111.0	110.9	110.2	111 7	112.7	114.2
Tobacco products	132.5	142.4	154.7	150.8	157.6	157.5	157.6	163 3	166.3	166.5
Intermediate materials 2/	102.6	99.1	101.5	99.5	102.7	103.1	103.5	103.7	104.2	104.1
Materials for food manufacturing	101.4	98.4	100.7	98.7	102.8	101.9	100.3	99.8	102.0	101 9
Flour	99.8	94.5	92.9	92.2	93.2	94.5	93.4	93 3	94.3	97.5
Refined sugar 3/	102.8	103.2	106.5	105.3	107.4	107.1	106.9	106.8	106.5	106.7
Crude vegetable oils	137.5	84.8	84.0	80.9	79.9	86.6	89.0	92.9	105.0	105 9
Crude materials 4/	95.8	87.7	93.6	89.9	95.7	95.3	94.6	94.3	93.4	94.6
Foodstuffs & feedstuffs	94 8	93.2	96.2	92.8	96.6	96.1	95.2	95.8	96.9	99.6
Fruits & vegetables 5/	102.6	103.9	106.6	101.9	102.5	101.5	123.0	113.0	117.0	99.3
Grains	96.1	79.2	71.1	66.7	69.5	72.8	74.9	78.9	77.5	83.5
Livestock	89.1	91.8	101.9	95.9	104.1	102.6	96.3	97.5	98.7	105.0
Poultry, live	117.8	129.6	101.2	104.1	100.3	88.5	93.9	87 7	96.6	86.9
Fibers, plant & animal	97.4	88.3	106.5	93.1	118.5	108.9	105.1	100.5	100.7	97.8
Fluid milk	93.6	90.9	91.9	94.6	92.7	93.2	93.1	91.5	90.5	89 1
Oilseeds	94 4	91.4	99.3	94.0	96.7	97.2	100.7	106.5	110.0	111.1
Tobacco, leaf	101.2	89.7	85.8	85.3	88.5	89.2	88.5	88 5	87.2	87.2
Sugar, raw cane	104.6	104.9	110.3	109.5	110.9	110.6	110.1	109.8	109.7	111.4
All commodities	103.1	100.1	102.8	101 0	103.7	104.1	104.2	104.1	104.5	104.6
Industrial commodities	103.7	99.9	102.6	100 8	103.5	104.0	104.2	104 1	104.3	104.4
All foods 6/	103.9	105.5	107.8	106.5	108.9	108.1	108.5	107.4	109.3	108.1
Farm products & processed foods & feeds	100.6	101.2	103.7	101.6	104.6	104.1	104.0	103 9	105.3	105.2
Farm products	95.1	92.9	95.4	91.1	96.1	94.9	96.0	95.4	96.8	97.5
Processed foods & feeds 6/	103.5	105.4	107.9	106.4	108.9	108.7	108.1	108.2	109.5	109.2
Cereal & bakery products	110.2	111.0	112.6	110.8	113.0	114.5	115.2	116.6	118.5	119.6
Sugar & confectionery	107.9	109.6	112 7	110.8	114.0	113.6	113.3	113.0	112.8	112.9
Beverages	107.7	114.5	112.5	112.8	111.6	112 3	112.3	112.2	112.4	112.9

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913

Table 8.—Farm-Retail Price Spreads

	Annual				1987					1988	
	1984	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Market basket 1/											
Retail cost (1967=100)	279.3	282.6	288.7	303.1	299.1	305.8	305.7	305.1	306.5	309.2	307.7
Farm value (1967=100)	255.4	237.2	234.1	240.4	237.1	243.2	235.6	237.2	231.8	233.2	235.3
Farm-retail spread (1967=100)	293.3	309.3	320.8	340.0	335.5	342.6	346.9	345.1	350.4	353.9	350.0
Farm value/retail cost (%)	33.9	31.1	30.0	29.4	29.4	29.4	28.5	28.8	28.0	27.9	28.3
Meat products											
Retail cost (1967=100)	268.1	265.5	273.9	284.2	285.3	300.7	300.2	298.4	296.4	295.5	294.3
Farm value (1967=100)	241.5	221.8	229.1	245.9	231.2	255.4	248.2	231.3	227.0	227.5	242.3
Farm-retail spread (1967=100)	299.1	316.6	326.2	350.7	348.6	353.7	361.1	377.0	377.7	375.2	354.6
Farm value/retail cost (%)	48.6	45.1	45.1	45.1	43.7	45.8	44.6	41.8	41.3	41.5	44.3
Dairy products											
Retail cost (1967=100)	253.2	258.0	258.4	264.6	264.3	266.0	267.2	267.2	266.8	268.7	268.4
Farm value (1967=100)	258.8	248.2	241.5	244.2	252.3	244.9	247.3	244.8	241.8	242.6	240.9
Farm-retail spread (1967=100)	246.3	266.5	273.3	282.5	274.8	284.5	284.7	286.8	286.7	291.6	292.5
Farm value/retail cost (%)	47.8	45.0	43.7	43.2	44.6	43.1	43.3	42.8	42.4	42.2	41.9
Poultry											
Retail cost (1967=100)	218.5	216.4	232.7	229.3	237.0	228.1	227.8	219.8	219.7	221.9	220.8
Farm value (1967=100)	249.9	234.9	255.4	206.5	216.7	201.7	182.0	194.1	190.6	196.3	184.9
Farm-retail spread (1967=100)	188.1	198.4	210.9	251.4	256.6	255.7	272.1	244.6	247.9	246.7	255.8
Farm value/retail cost (%)	56.3	53.4	54.0	44.3	45.0	43.3	39.3	43.4	42.7	43.5	41.2
Eggs											
Retail cost (1967=100)	209.0	174.3	186.3	175.5	187.2	187.0	175.1	179.8	163.8	172.6	163.8
Farm value (1967=100)	230.3	178.8	192.7	160.2	179.2	183.7	148.2	168.0	139.2	142.3	134.6
Farm-retail spread (1967=100)	178.2	167.6	177.1	197.7	198.8	191.8	213.8	197.0	199.4	216.3	205.9
Farm value/retail cost (%)	65.1	60.7	61.1	53.9	56.6	58.1	50.0	55.2	50.2	48.7	48.6
Cereal & bakery products											
Retail cost (1967=100)	305.3	317.0	325.8	336.9	332.3	338.9	339.5	341.2	343.2	347.0	348.7
Farm value (1967=100)	192.0	175.9	142.3	131.3	130.4	130.8	134.6	142.0	138.9	143.7	152.3
Farm-retail spread (1967=100)	328.7	346.2	363.7	378.5	374.1	382.0	381.9	382.4	385.5	389.5	388.7
Farm value/retail cost (%)	10.8	9.5	7.5	6.7	6.7	6.6	6.6	7.1	6.9	7.1	7.5
Fresh fruits											
Retail cost (1967=100)	345.3	383.5	390.1	444.0	427.1	451.2	466.9	430.5	416.4	429.2	429.6
Farm value (1967=100)	315.1	302.7	285.3	290.3	304.8	273.0	293.4	326.6	304.3	264.9	271.5
Farm-retail spread (1967=100)	358.8	419.8	437.1	513.0	482.0	531.2	544.8	477.2	466.7	503.0	499.0
Farm value/retail cost (%)	28.3	24.4	22.7	20.3	22.1	18.8	19.5	23.5	22.6	19.1	19.6
Fresh vegetables											
Retail costs (1967=100)	331.8	317.5	330.3	372.0	374.4	351.5	345.0	371.8	430.0	441.2	408.9
Farm value (1967=100)	298.7	256.7	248.1	309.4	266.9	291.3	237.5	401.2	361.8	359.4	284.0
Farm-retail spread (1967=100)	347.4	346.1	369.0	401.3	425.0	379.8	395.6	356.0	462.3	479.6	467.1
Farm value/retail cost (%)	28.8	25.9	24.0	26.6	22.8	26.5	22.0	34.5	26.9	26.0	22.9
Processed fruits & vegetables											
Retail cost (1967=100)	306.1	314.1	309.1	319.6	313.0	323.2	322.0	321.8	323.1	327.8	333.1
Farm value (1967=100)	343.5	378.5	326.3	354.4	361.8	343.2	335.3	338.1	375.4	381.8	387.5
Farm-retail spread (1967=100)	297.8	299.9	305.3	311.8	302.2	318.8	319.0	318.2	311.5	316.0	321.1
Farm value/retail costs (%)	20.3	21.8	19.1	20.1	21.0	19.2	18.9	19.0	21.1	21.1	21.1
Fats & oils											
Retail cost (1967=100)	288.0	294.4	287.8	291.9	289.9	291.2	290.1	291.8	291.0	293.0	295.6
Farm value (1967=100)	324.6	271.3	199.1	192.8	189.0	186.3	194.5	195.9	204.1	243.6	238.2
Farm-retail spread (1967=100)	273.9	303.3	321.9	330.0	328.7	331.5	326.9	328.7	324.4	312.0	317.9
Farm value/retail cost (%)	31.3	25.6	19.4	18.4	18.1	17.8	18.6	18.6	19.5	23.1	22.4

	Annual				1987					1988	
	1984	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Beef, Choice											
Retail price 2/ (cts/lb)	239.6	232.6	230.7	242.5	233.6	245.5	245.7	246.6	245.3	242.9	246.3
Net carcass value 3/ (cts)	147.6	135.2	133.1	145.3	137.5	144.9	144.6	142.4	141.1	144.7	148.3
Net farm value 4/ (cts)	140.0	126.8	124.4	137.9	131.7	137.6	137.1	136.1	134.6	136.6	143.2
Farm-retail spread (cts)	99.6	105.8	106.3	104.6	101.9	107.9	108.6	110.5	110.7	106.3	103.1
Carcass-retail spread 5/ (cts)	92.0	97.4	97.6	97.2	96.1	100.6	101.1	104.2	104.2	98.2	98.0
Farm-carcass spread 6/ (cts)	7.6	8.4	8.7	7.4	5.8	7.3	7.5	6.3	6.5	8.1	5.1
Farm value/retail price (%)	58	55	54	57	56	56	56	55	55	56	58
Pork											
Retail price 2/ (cts/lb)	162.0	162.0	178.4	188.4	185.6	196.9	194.4	189.2	185.6	185.3	183.1
Wholesale value 3/ (cts)	110.1	101.1	110.9	113.0	103.8	119.8	112.7	103.1	105.5	104.0	105.3
Net farm value 4/ (cts)	77.4	71.4	82.4	82.7	77.8	87.8	77.8	65.0	66.2	71.3	75.5
Farm-retail spread (cts)	84.6	90.6	96.0	105.7	107.8	109.1	116.6	124.2	119.4	114.0	107.6
Wholesale-retail spread 5/ (cts)	51.9	60.9	67.5	75.4	81.8	77.1	81.7	86.1	79.1	81.3	77.8
Farm-wholesale spread 6/ (cts)	32.7	29.7	28.5	30.3	26.0	32.0	34.9	38.1	40.3	32.7	29.8
Farm value/retail price (%)	48	44	46	44	42	45	40	34	36	38	41

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 749, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1286.

Table 9.—Price Indexes of Food Marketing Costs

(See the March 1988 issue.)

Information contact: Denis Dunham (202) 786-1870.

Livestock and Products

Table 10.—U.S. Meat Supply & Use

Item	Beg stocks	Production 1/	Imports	Total supply	Exports	Shipments	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/								Pounds	
Beef:										
1985	472	23,728	2,071	26,271	328	51	420	25,473	78.8	58.37
1986	420	24,371	2,129	26,919	521	52	412	25,935	78.4	57.75
1987	412	23,566	2,269	26,247	604	56	386	25,201	75.5	64.60
1988 F	386	22,586	2,300	25,272	530	60	435	24,247	72.0	64-70
Pork:										
1985	348	14,807	1,128	16,283	128	131	289	15,734	61.9	44.77
1986	289	14,063	1,122	15,475	86	132	248	15,009	58.4	51.19
1987	248	14,374	1,195	15,817	109	127	347	15,235	58.8	51.69
1988 F	347	15,187	1,300	16,834	120	140	330	16,244	62.1	42-48
Veal:										
1985	14	515	20	549	4	1	11	533	1.8	62.42
1986	11	524	27	562	5	1	7	549	1.9	60.89
1987	7	429	24	460	7	1	4	448	1.5	78.05
1988 F	4	413	25	442	5	1	7	429	1.4	81-87
Lamb and mutton:										
1985	7	358	36	401	1	2	13	385	1.4	68.61
1986	13	338	41	392	1	2	13	376	1.4	70.26
1987	13	315	44	372	1	2	8	361	1.3	78.09
1988 F	8	328	50	386	2	1	9	374	1.3	74-80
Total red meat:										
1985	841	39,408	3,255	43,504	461	185	733	42,125	144.0	NA
1986	733	39,296	3,319	43,348	613	187	679	41,869	140.1	NA
1987	679	38,684	3,532	42,895	721	186	738	41,244	137.1	NA
1988 F	745	38,514	3,675	42,934	657	202	781	41,294	136.8	NA
Broilers:										
1985	20	13,762	0	13,781	417	143	27	13,195	55.2	50.8
1986	27	14,316	0	14,342	566	149	24	13,603	56.3	56.9
1987	24	15,552	0	15,579	752	151	25	14,648	60.1	47.4
1988 F	25	16,332	0	16,357	770	140	25	15,422	62.7	43-49
Mature chicken:										
1985	119	636	0	755	21	1	144	589	2.5	NA
1986	144	629	0	773	16	3	163	591	2.4	NA
1987	163	655	0	818	16	2	188	612	2.5	NA
1988 F	188	676	0	864	25	4	160	675	2.7	NA
Turkeys:										
1985	125	2,942	0	3,067	27	7	150	2,884	12.0	75.5
1986	150	3,271	0	3,422	27	4	178	3,212	13.3	72.2
1987	178	3,855	0	4,034	33	4	282	3,714	15.2	57.8
1988 F	282	4,255	0	4,537	33	4	250	4,248	17.3	49-55
Total poultry:										
1985	264	17,340	0	17,604	465	151	321	16,668	69.7	NA
1986	321	18,216	0	18,537	609	156	365	17,407	72.1	NA
1987	365	20,063	0	20,428	800	157	495	18,975	77.9	NA
1988 F	495	21,263	0	21,758	830	148	435	20,345	82.7	NA
Red meat & poultry:										
1985	1,105	56,748	3,255	61,108	926	336	1,054	58,792	213.6	NA
1986	1,054	57,512	3,319	61,885	1,222	343	1,044	59,276	212.1	NA
1987	1,044	58,747	3,532	63,323	1,521	343	1,240	60,219	215.0	NA
1988 F	1,240	59,777	3,675	64,692	1,487	350	1,216	61,639	219.5	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was changed from .74 to .73 beginning in 1986.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: Choice slaughter lambs, San Angelot broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. F = forecast. NA = not available.

Information contacts: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1285.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Shipments	Hatching use	Ending stocks	Consumption: Total	Consumption: Per capita	Wholesale price*
	Million dozen									No	Cts/doz
1983	20.3	5,659.2	23.4	5,702.9	85.8	26.6	500.0	9.3	5,081.2	259.8	75.2
1984	9.3	5,708.3	32.0	5,749.5	58.2	27.8	529.7	11.1	5,122.8	259.4	80.9
1985	11.1	5,688.0	12.7	5,711.8	70.6	30.3	548.1	10.7	5,052.0	253.4	66.4
1986	10.7	5,705.0	13.7	5,729.3	101.6	28.0	566.8	10.4	5,022.5	249.5	71.1
1987	10.4	5,796.5	5.6	5,811.7	111.2	25.1	595.3	14.0	5,066.8	249.5	61.6
1988 F	14.0	5,780.0	4.0	5,798.0	112.0	24.0	625.0	10.0	5,027.0	245.2	56-62

* Cartoned Grade A large eggs, New York. F = forecast.

Information contact: Robert Bishop (202) 786-1714.

Table 12.—U.S. Milk Supply & Use[1]

Calendar year	Production	Farm use	Commercial: Farm marketings	Commercial: Beg. stocks	Imports	Total commercial supply	CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price 2/
	Billion pounds									$/cwt
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986	143.4	2.6	140.8	4.6	2.7	148.1	10.6	4.2	133.4	12.51
1987 P	142.5	2.6	139.9	4.2	2.5	146.6	6.7	4.6	135.3	12.53
1988 F	146.0	2.5	143.5	4.6	2.6	150.6	8.0	4.7	137.9	11.80

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. P = Preliminary. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry & Eggs

	Annual: 1985	Annual: 1986	Annual: 1987 P	1987: Feb	1987: Sept	1987: Oct	1987: Nov	1987: Dec	1988: Jan	1988: Feb
Broilers										
Federally inspected slaughter, certified (mil lb)	13,569.2	14,265.6	15,498.1	1,157.8	1,370.7	1,381.4	1,177.1	1,336.8	1,305.8	1,200.2
Wholesale price, 12-city, (cts/lb)	50.8	56.9	47.4	49.9	46.4	43.2	40.7	39.8	43.9	44.4
Price of grower feed ($/ton)	197	187	224	172	190	194	196	197	194	198
Broiler-feed price ratio 1/	3.1	3.7	3.7	3.5	3.0	2.6	2.7	2.5	2.8	2.6
Stocks beginning of period (mil lb)	19.7	26.6	30.7	27.2	24.7	28.3	27.3	24.1	24.8	31.0
Broiler-type chicks hatched (mil) 2/	4,803.8	5,013.3	535.1	406.1	430.7	438.8	420.2	465.5	464.5	431.7
Turkeys										
Federally inspected slaughter, certified (mil lb)	2,800	3,133	3,715	211.9	383.3	411.0	373.5	297.0	255.4	248.8
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	75.5	72.2	57.8	58.5	56.1	54.7	60.7	66.5	52.8	47.1
Price of turkey grower feed ($/ton)	212	215	256	208	220	214	217	218	227	223
Turkey-feed price ratio 1/	4.5	4.1	3.9	3.4	2.8	2.8	3.1	3.5	2.8	2.6
Stocks beginning of period (mil lb)	125.3	150.2	437.2	198.1	560.0	640.8	629.9	321.5	282.4	299.3
Poults placed in U.S. (mil)	197.8	225.4	26.5	22.6	15.7	16.7	17.7	19.9	22.3	23.1
Eggs										
Farm Production (mil)	68,256	68,459	6,955	5,350	5,686	5,931	5,803	6,007	5,960	5,607
Average number of layers (mil) 3/	277	278	280	236	233	236	237	238	237	236
Rate of lay (eggs per layer on farms) 3/	247	248	248	18.9	20.2	21.0	20.4	21.2	21.1	19.9
Cartoned price, New York, grade A large (cts/doz) 4/	66.4	71.1	61.6	65.2	68.3	60.2	60.5	56.9	55.9	52.7
Price of laying feed ($/ton)	182	174	203	164	178	168	167	168	176	177
Egg-feed price ratio 1/	6.3	7.0	7.6	7.1	6.7	6.1	6.6	5.8	5.6	5.3
Stocks, first of month										
Shell (mil doz)	93	72	1.16	60	96	99	1.53	1.20	1.29	2.01
Frozen (mil doz)	10.2	10.0	14.5	10.9	13.3	12.5	13.6	13.2	13.1	13.9
Replacement chicks hatched (mil)	407	425	43.1	35.2	32.5	34.2	31.0	31.6	29.5	28.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 12 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 States. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. P = preliminary.

Information contact: Mark Weimar (202) 786-1714.

Table 14.—Dairy

	Annual			1987					1988	
	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Milk prices, Minnesota-Wisconsin, 3.5% fat ($/cwt) 1/	11.48	11.30	11.23	11.27	11.42	11.35	11.34	11.12	10.910	10.60
Wholesale prices										
Butter, Grade A Chi. (cts/lb)	141.1	144.5	140.2	136.7	145.3	136.8	135.6	134.0	131.9	131.0
Am. Cheese, Wis. assembly pt. (cts/lb)	127.7	127.3	123.2	122.5	126.6	121.9	121.3	120.7	118.4	116.1
Nonfat dry milk, (cts/lb) 2/	84.0	80.6	79.3	79.0	80.4	80.0	77.6	77.0	79.8	73.0
USDA net removals										
Total milk equiv. (mil lb) 3/	13,174.1	10,628.1	6,706.0	862.8	349.9	660.4	429.3	746.4	1,628.4	1,486.6
Butter (mil lb)	334.2	287.6	187.3	31.1	10.0	22.2	10.9	18.7	56.4	59.7
Am. Cheese (mil lb)	629.0	468.4	282.0	21.8	14.0	19.8	20.4	36.1	46.6	25.5
Nonfat dry milk (mil lb)	940.6	827.3	559.4	41.2	33.7	30.4	24.2	42.4	48.1	39.6
Milk										
Milk prod. 21 States (mil lb)	121,043	121,433	121,094	9,226	9,718	9,931	9,572	10,038	10,205	9,740
Milk per cow (lb)	13,160	13,399	13,932	1,052	1,124	1,148	1,107	1,158	1,177	1,126
Number of milk cows (thou)	9,198	9,063	8,692	8,766	8,645	8,653	8,647	8,667	8,667	8,649
U.S. milk production (mil lb)	143,147	143,381	142,462	6/10,896	6/11,417	6/11,665	6/11,264	6/11,808	6/12,045	6/11,495
Stock, beginning										
Total (mil lb)	16,704	13,695	12,867	12,970	10,585	9,984	8,804	8,147	7,371	7,628
Commercial (mil lb)	4,937	4,590	4,165	4,480	5,340	5,386	5,026	4,696	4,577	4,777
Government (mil lb)	11,767	9,105	8,702	8,490	5,245	4,598	3,779	3,451	2,794	2,852
Imports, total (mil lb) 3/	2,777	2,733	2,490	151	210	261	279	249	233	NA
Commercial disappearance milk equiv. (mil lb)	130,640	133,350	135,274	10,151	11,020	11,409	11,233	11,213	10,233	NA
Butter										
Production (mil lb)	1,247.8	1,202.4	1,113.4	97.8	78.1	90.2	88.2	109.4	124.7	117.1
Stocks, beginning (mil lb)	296.5	205.5	193.0	206.6	187.3	176.2	165.6	158.5	143.2	157.3
Commercial disappearance (mil lb)	918.2	922.9	911.8	74.1	63.3	72.0	85.3	82.2	65.6	NA
American cheese										
Production (mil lb)	2,855.2	2,798.2	2,740.9	211.2	206.5	217.6	210.2	231.7	225.8	221.0
Stocks, beginning (mil lb)	960.5	850.2	697.1	674.2	533.3	505.0	446.5	401.8	364.1	365.7
Commercial disappearance (mil lb)	2,279.1	2,382.8	2,468.3	189.9	194.2	225.7	199.3	226.5	173.5	NA
Other cheese										
Production (mil lb)	2,225.7	2,411.0	2,576.8	189.7	220.5	228.1	218.9	225.3	207.0	207.8
Stocks, beginning (mil lb)	101.4	94.1	92.0	93.5	96.9	95.5	96.8	92.6	89.7	90.0
Commercial disappearance (mil lb)	2,515.7	2,684.9	2,829.3	209.9	244.8	253.9	254.8	250.6	224.0	NA
Nonfat dry milk										
Production (mil lb)	1,390.0	1,284.1	1,039.2	80.3	65.7	65.6	65.0	89.3	83.8	85.8
Stocks, beginning (mil lb)	1,247.6	1,011.1	686.8	596.6	301.8	245.9	200.4	188.0	177.2	130.7
Commercial disappearance (mil lb)	435.0	479.1	475.3	28.4	42.5	45.3	40.8	27.4	44.0	NA
Frozen dessert										
Production (mil gal) 4/	1,251.0	1,248.6	1,273.1	90.0	108.5	95.2	81.7	84.6	76.0	87.6

	Annual			1986		1987				1988
	1985	1986	1987	III	IV	I	II	III	IV	I P
Milk production (mil lb)	143,147	143,381	142,462	35,459	33,716	34,814	37,399	35,512	34,737	35,910
Milk per cow (lb)	12,994	13,260	13,786	3,325	3,199	3,340	3,617	3,453	3,375	3,490
No. of milk cows (thou)	11,016	10,813	10,334	10,664	10,541	10,424	10,339	10,283	10,219	10,290
Milk-feed price ratio 5/	1.72	1.73	1.83	1.72	1.91	1.88	1.76	1.80	1.89	1.75
Returns over concentrate costs ($/cwt milk)	8.54	9.23	9.50	8.97	10.10	9.82	8.99	9.26	9.97	9.30

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. NA = not available. P = preliminary.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1987					1988	
	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
U.S. wool price, Boston 1/ (cts/lb)	192	191	265	202	295	300	300	300	315	397
Imported wool price, Boston 2/ (cts/lb)	197	201	247	212	244	259	274	278	295	330
U.S. mill consumption, scoured										
Apparel wool (thou lb)	106,051	126,769	137,498	11,736	12,438	10,691	10,287	11,844	10,990	10,688
Carpet wool (thou lb)	10,562	9,960	13,091	811	1,174	1,414	1,063	708	1,323	1,440

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4'' and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1987					1988	
	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Cattle on feed (7 States)										
Number on feed (thou head) 1/	8,635	7,920	7,643	7,304	6,818	7,535	8,364	8,412	8,066	7,856
Placed on feed (thou head)	19,346	20,035	21,020	1,442	2,424	2,604	1,609	1,350	1,660	1,369
Marketings (thou head)	18,989	19,263	19,390	1,478	1,636	1,690	1,458	1,577	1,759	1,527
Other disappearance (thou head)	1,132	1,049	1,207	105	71	85	103	119	111	126
Beef steer-corn price ratio, Omaha 2/	23.3	31.0	41.0	44.0	42.8	41.2	38.4	36.7	36.4	37.4
Hog-corn price ratio, Omaha 2/	17.8	27.8	33.7	35.1	36.3	31.0	24.3	23.8	25.0	25.7
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, Omaha	58.37	57.75	64.60	61.02	64.81	64.81	64.20	63.93	65.00	68.31
Utility cows, Omaha	38.32	37.19	44.83	42.29	47.62	46.41	44.46	46.69	47.83	49.55
Choice vealers, S. St. Paul	58.28	59.92	78.74	68.28	80.25	82.50	82.50	83.00	86.88	87.50
Feeder cattle										
Choice, Kansas City, 600-700 lb.	64.56	62.79	75.36	71.38	81.50	77.00	79.50	78.90	85.00	83.53
Slaughter hogs										
Barrows & gilts, 7-markets	44.77	51.19	51.69	48.73	54.72	48.75	40.65	44.14	44.43	47.01
Feeder pigs										
S. Mo. 40-50 lb. (per head)	37.20	45.62	46.69	53.96	47.28	41.53	36.56	31.74	37.47	44.80
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.61	69.46	78.09	75.75	70.05	66.25	65.00	73.83	83.53	77.25
Ewes, Good, San Angelo	34.02	34.78	38.62	41.25	39.81	37.12	37.83	39.88	43.19	38.25
Feeder lambs										
Choice, San Angelo	85.91	73.14	102.26	99.50	102.55	102.00	89.50	105.83	113.63	112.63
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	90.76	88.98	97.21	91.69	96.87	96.77	95.34	94.50	97.15	99.50
Canner & cutter cow beef	74.13	71.31	83.70	80.88	86.82	83.80	83.41	88.45	88.98	92.18
Pork loins, 8-14 lb. 3/	91.51	104.78	106.23	99.40	122.66	103.49	80.35	84.70	102.43	94.93
Pork bellies, 12-14 lb.	59.50	65.82	63.11	57.81	59.74	49.39	45.86	42.60	51.82	48.39
Hams, skinned, 14-17 lb.	67.50	80.01	80.96	65.43	83.58	97.81	96.36	91.98	66.70	76.67
All fresh beef retail price 4/	NA	NA	212.64	205.46	214.51	217.69	218.57	218.53	213.95	217.58
Commercial slaughter (thou head)*										
Cattle	36,293	37,288	35,647	2,659	3,070	3,131	2,752	2,900	2,921	2,758
Steers	16,912	17,516	17,443	1,283	1,424	1,512	1,314	1,425	1,464	1,400
Heifers	11,237	11,097	10,906	823	1,055	962	817	968	891	815
Cows	7,391	7,960	6,608	502	527	593	570	555	519	495
Bulls & stags	758	715	690	51	64	64	51	51	47	48
Calves	3,385	3,408	2,836	237	243	249	223	253	214	210
Sheep & lambs	6,165	5,635	5,198	400	474	460	411	451	390	416
Hogs	84,492	79,598	81,090	6,055	7,030	7,723	7,321	7,815	6,977	6,682
Commercial production (mil lb)										
Beef	23,557	24,213	23,406	1,745	2,041	2,098	1,829	1,925	1,943	1,828
Veal	499	509	422	35	36	37	32	36	32	32
Lamb & mutton	352	331	309	24	28	28	25	27	24	26
Pork	14,728	13,988	14,314	1,070	1,228	1,363	1,312	1,390	1,244	1,183

	Annual			1986	1987				1988	
	1985	1986	1987	IV	I	II	III	IV	I	II
Cattle on feed (13 States)										
Number on feed (thou head) 1/	10,653	9,754	9,245	8,197	9,245	8,807	8,666	8,992	9,769	NA
Placed on feed (thou head)	23,366	23,583	24,874	6,756	5,680	5,906	6,590	6,698	NA	NA
Marketings (thou head)	22,887	22,856	22,971	5,396	5,747	5,619	6,022	5,583	6/5,875	NA
Other disappearance (thou head)	1,378	1,236	1,379	312	371	428	242	338	NA	NA
Hogs & pigs (10 States) 5/										
Inventory (thou head) 1/	42,420	41,100	39,690	39,585	39,690	38,370	40,880	43,075	42,275	40,495
Breeding (thou head) 1/	5,348	5,258	5,110	4,895	5,110	5,215	5,325	5,300	5,400	5,420
Market (thou head) 1/	37,072	35,842	34,580	34,690	34,580	33,155	35,555	37,775	36,875	35,075
Farrowings (thou head)	8,831	8,223	8,783	2,115	1,967	2,352	2,257	2,258	2,030	6/2,399
Pig crop (thou head)	67,648	63,835	68,417	16,460	14,840	18,601	17,481	17,495	15,765	NA

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Beginning January 1984 prices are for 14-17 lb.; January 1986 prices are for 14-18 lb. 4/ New series estimating the composite price of all beef grades and ground beef sold by retail stores. This new series in addition to but does not replace the series for the retail price of choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 6/ Intentions. *Classes estimated. NA = not available.

Information contacts: Ron Gustafson or Leland Southard (202) 786-1285.

Table 17.—Supply & Utilization[1,2]

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
		Mil. acres		Bu/acre				Mil. bu				$/bu
Wheat												
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	39.4	2,420	3,938	369	742	1,429	2,540	1,398	3.51
1984/85	18.3	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86*	18.6	75.6	64.7	37.5	2,425	3,866	270	776	915	1,961	1,905	3.08
1986/87*	20.4	72.1	60.7	34.4	2,082	4,018	385	808	1,004	2,197	1,821	2.42
1987/88*	20.2	65.6	55.9	37.6	2,105	3,941	275	835	1,600	2,710	1,231	2.55
		Mil. acres		Lb/acre				Mil. cwt (rough equiv.)				$/cwt
Rice												
1982/83	0.42	3.30	3.26	4,710	153.6	203.3	--	6/62.9	68.9	131.8	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	99.7	172.1	--	6/54.9	70.3	125.0	46.8	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.8	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.27	2.38	2.36	5,651	133.4	213.3	--	6/76.3	85.4	161.7	51.6	3.75
1987/88*	1.26	2.35	2.33	5,482	127.7	182.3	--	6/78.8	73.0	151.8	30.5	7.00-8.00
		Mil. acres		Bu/acre				Mil. bu				$/bu
Corn												
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	894	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.8	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.0	8,877	10,535	4,085	1,160	1,241	6,496	4,040	2.23
1986/87*	13.6	76.7	69.2	119.3	8,253	12,294	4,717	1,181	1,504	7,412	4,882	1.50
1987/88*	21.6	65.7	59.2	119.4	7,064	11,948	4,900	1,225	1,700	7,825	4,123	1.65-1.85
		Mil. acres		Bu/acre				Mil. bu				$/bu
Sorghum												
1982/83	0.7	16.0	14.1	58.1	835	1,154	495	10	210	715	439	2.47
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.3	15.3	13.9	67.7	942	1,493	548	15	198	761	732	1.37
1987/88*	3.8	11.8	10.6	69.5	741	1,472	550	15	225	790	682	1.50-1.70
		Mil. acres		Bu/acre				Mil. bu				$/bu
Barley												
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	508	733	282	170	92	544	189	2.47
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	51.0	591	848	333	168	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	611	942	276	174	137	586	336	1.61
1987/88*	2.9	11.0	10.0	52.6	527	878	275	175	130	580	298	1.80-1.85
		Mil. acres		Bu/acre				Mil. bu				$/bu
Oats												
1982/83	0.1	14.0	10.3	57.8	593	748	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88*	1.0	18.0	6.9	54.0	374	542	350	75	1	426	116	1.50-1.60
		Mil. acres		Bu/acre				Mil. bu				$/bu
Soybeans												
1982/83	0	70.9	68.4	31.5	2,190	2,444	7/86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/104	1,179	757	2,040	436	4.80
1987/88*	0	57.4	56.4	33.7	1,905	2,341	7/96	1,170	785	2,051	290	5.50-5.80
								Mil. lbs				8/ Cts/lb
Soybean oil												
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,025	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	28.5
1985/86*	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.0
1986/87*	--	--	--	--	12,783	13,745	--	10,833	1,187	12,020	1,725	15.4
1987/88*	--	--	--	--	12,880	14,605	--	11,000	2,205	13,205	1,400	18.0-21.0
								Thou. tons				9/ $/ton
Soybean meal												
1982/83	--	--	--	--	26,714	26,889	--	19,306	7,109	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86*	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,758	27,970	--	20,387	7,343	27,730	240	163
1987/88*	--	--	--	--	28,010	28,050	--	21,050	6,700	27,750	300	185-200

See footnotes at end of table.

Table 17.— Supply & Utilization, continued

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			Lb/acre	Mil. bales							Cts/lb
Cotton 10/												
1982/83	1.6	11.3	9.7	580	12.0	18.6	--	5.5	5.2	10.7	7.9	59.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	56.5
1986/87*	3.4	10.0	8.5	582	8.7	19.1	--	7.4	6.7	14.1	5.0	52.2
1987/88*	3.3	10.4	10.0	703	14.7	19.8	--	7.8	6.6	14.4	5.5	--

*April 11, 1988 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum. October 1 for soymeal, and soyoil. 2/ Conversion factors: Hectare (ha) = 2.471 acres; 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1987				1988	
	1983/84	1984/85	1985/86	1986/87	Feb	Oct	Nov	Dec	Jan	Feb
Wholesale prices										
Wheat, No 1 HRW, Kansas City ($/bu) 2/	3.84	3.74	3.28	2.72	2.80	2.90	2.90	3.70	3.20	3.30
Wheat, DNS, Minneapolis ($/bu) 2/	4.21	3.70	3.25	2 62	2.65	2.85	2.81	2.96	3.12	3 26
Rice, S.W. La ($/cwt) 3/	19.38	17.98	16.11	10.25	9.96	17.70	19.75	19 70	20.60	24.45
Wheat										
Exports (mil bu)	1,429	1,424	915	1,004	72	105	79	118	140	NA
Mill grind (mil bu)	694	676	711	779	62	71	68	64	58	NA
Wheat flour production (mil cwt)	308	301	320	351	28	32	30	28	26	NA
Rice										
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	4.3	10.0	8.0	4.5	5.4	NA

	Marketing year 1/			1986		1987				1988
	1984/85	1985/86	1986/87	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
Wheat										
Stocks, beginning (mil bu)	1,399	1,425	1,905	1,905.0	3,154.6	2,671.5	2,249.8	1,820.9	2,988 5	2,505.9
Domestic use:										
Food (mil bu)	651	683	714	174.1	192.2	177.2	180.3	184.9	196.1	NA
Feed & seed (mil bu) 4/	502	363	548	346.8	31.1	47.6	38.7	345.5	-17.7	NA
Exports (mil bu)	1,424	915	1,004	320.6	263.4	202.7	216.8	409.9	308.5	NA

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual). NA = not available.

Information contacts: Ed Allen and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1987				1988	
	1983/84	1984/85	1985/86	1986/87	Feb	Oct	Nov	Dec	Jan	Feb
U.S. price, SLM, 1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	54.8	64.3	64.7	62.3	59.7	57.8
Northern Europe prices:										
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	60 8	76.2	75.8	75.3	72 2	67.5
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	64.8	76.8	76.4	75.0	72.8	69.8
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	587	650	635	645	621	649
Exports (thou bales)	6,786	6,201	1,969	6,684	544	367	615	721	663	697
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	12,012	6,218	9,660	12,058	12,947	12,593

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index: average of 5 lowest priced of 11 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1987				1988	
	1983/84	1984/85	1985/86	1986/87	Feb	Oct	Nov	Dec	Jan	Feb
Wholesale prices										
Corn, No. 2 yellow, Chicago ($/bu)	3.46	2.79	2.35	1.64	1.50	1.73	1.86	1.89	1.95	2.01
Sorghum, No. 2 yellow, Kansas City ($/cwt)	5.22	4.46	3.72	2.73	2.57	2.75	2.90	2.95	3.05	3.25
Barley, feed, Minneapolis ($/bu) 2/	2.48	2.09	1.53	1.44	NA	1.78	1.82	1.74	1.72	1.77
Barley, malting, Minneapolis ($/bu)	2.84	2.55	2.24	1.88	1.92	2.08	2.05	2.01	2.02	2.15
Exports										
Corn (mil bu)	1,902	1,865	1,241	1,504	99	139	123	149	134	NA
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.3	3.4	4.3	3.8	4.2	4.1	NA

	Marketing year 1/				1986	1987				1988
	1983/84	1984/85	1985/86	1986/87	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb
Corn										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	4,040	10,306	8,248	6,332	4,882	9,769
Domestic use:										
Feed (mil bu)	3,818	4,079	4,095	4,717	1,384	1,472	1,091	768	1,488	1,451
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	280	270	325	315	292	277
Exports (mil bu)	1,902	1,865	1,241	1,504	321	315	500	368	398	410
Total use (mil bu)	6,694	7,036	6,496	7,410	1,985	2,058	1,917	1,451	2,178	2,138

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. NA = not available.

Information Contact: Larry Van Meir (202) 786-1840.

Table 21.—Fats & Oils

	Marketing year 1/				1987					1988
	1983/84	1984/85	1985/86	1986/87	Jan	Sept	Oct	Nov	Dec	Jan
Soybeans										
Wholesale price, No. 1 yellow, Chicago ($/bu) 2/	7.78	5.88	5.20	5.03	4.90	5.14	5.18	5.53	5.85	6.13
Crushings (mil bu)	982.7	1,030.5	1,052.8	1,178.8	110.3	79.7	102.5	111.2	110.8	105.9
Exports (mil bu)	742.8	600.7	740.7	756.9	71.7	56.7	97.9	98.1	76.7	77.0
Stocks, beginning (mil bu)	344.6	175.7	316.0	536.0	117.2	31.2	65.7	158.5	155.5	145.0
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	30.55	29.52	18.02	15.36	15.60	15.58	17.03	17.55	19.00	21.98
Production (mil lb)	10,862.8	11,467.9	11,617.3	12,783.1	1,185.6	861.4	1,119.7	1,207.1	1,208.1	1,165.0
Domestic disap. (mil lb)	9,589.6	9,888.5	10,045.9	10,820.1	787.0	911.0	1,083.9	895.1	857.3	800.3
Exports (mil lb)	1,813.7	1,659.9	1,257.3	1,184.5	67.9	224.8	100.1	139.0	134.0	25.7
Stocks, beginning (mil lb)	1,260.9	720.5	632.5	946.6	1,506.5	1,979.4	1,725.0	1,660.6	1,833.7	2,050.5
Soybean meal										
Wholesale price, 44% protein, Decatur ($/ton)	188.21	125.46	154.88	162.61	146.80	177.20	185.50	206.60	214.80	193.75
Production (thou ton)	22,756.2	24,529.9	24,951.3	27,758.8	2,590.1	1,887.7	2,439.4	2,667.8	2,648.3	2,526.6
Domestic disap. (thou ton)	17,538.8	19,481.3	19,117.2	20,387.4	1,934.3	1,744.2	2,151.6	2,113.9	2,012.6	1,799.1
Exports (thou ton)	5,436.1	4,916.5	6,009.3	7,343.0	584.9	204.6	260.4	509.7	652.3	635.0
Stocks, beginning (thou ton)	474.1	255.4	386.9	211.7	240.3	301.3	240.2	267.6	311.8	296.2
Margarine, wholesale price, Chicago, white (cts/lb)	46.3	55.5	51.2	40.3	39.25	40.00	41.69	42.65	44.20	46.75

1/ Beginning September 1 for soybeans; October 1 for soymeal and oil; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates: Deficiency	Payment rates: Paid land diversion	Payment rates: PIK	Base acres	Program 1/	Partici-pation rate 2/
			$/bu.			Percent 3/	Mil. acres		Percent of base
Wheat									
1983/84	4.30	3.65		.65	2.70	95	90.9	15/5/10-30	78/78/51
1984/85	4.38	3.30		1.00	2.70	85	94.0	20/10/10-20	60/60/20
1985/86	4.38	3.30		1.08	2.70		94.0	20/10/0	73
1986/87 4/	4.38	3.00	2.40	1.98	2.00	1.10	92.2	22.5/2 5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.76			91.6	27.5/0/0	87
1988/89	4.23	2.76	2.21	1.53				27.5/0/0	
			$/cwt						
Rice									
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/98/87
1984/85	11.90	8.00		3.76			4.16	25/0/0	85
1985/86	11.90	8.00	5/3.16	3.90	3.50		4.23	20/15/0	89
1986/87 4/	11.90	7.20	5/3.82	4.70			4.20	35/0/0	92
1987/88	11.66	6.84	5/5.75	4.82			4.20	35/0/0	97
1988/89	11.15	6.63	5/7.00	1.65			4.22	25/0/0	85
			$/bu.						
Corn									
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 4/	3.03	2.40	1.82	1.11	.73		81.9	17.5/2.5/0	85
1987/88	3.03	2.28	1.82	1.21	2.00		83.3	20/15/0	88/55
1988/89	2.93	2.21	1.77	1.10	1.75			20/10/0: 0/92	
			$/bu.						
Sorghum									
1983/84	2.72	2.52		0	1.50	80	18.0	6/[same]	72/72/53
1984/85	2.88	2.42		.46			18.2		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 4/	2.88	2.28	1.82	1.06	.65		18.7		75
1987/88	2.88	2.18	1.74	1.14	1.90		18.1		83/42
1988/89	2.78	2.10	1.68	1.08	1.65				
			$/bu.						
Barley									
1983/84	2.60	2.16		.21	1.00		11.0	6/[same]	55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 4/	2.60	1.85	1.56	1.04	.57		12.4		73
1987/88	2.60	1.86	1.48	1.11	1.60		12.9		82/23
1988/89	2.51	1.80	1.44	.76	1.40				
			$/bu.						
Oats									
1983/84	1.60	1.36		.11	.75		9.8	6/[same]	20/20/0
1984/85	1.60	1.31		0			9.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 4/	1.60	1.24	.99	.50	.36		9.5		37
1987/88	1.60	1.18	.94	.55	.80		8.7		44/15
1988/89	1.55	1.13	.90	.30				5/0/0: 0/92	
			$/bu.						
Soybeans 7/									
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 4/		4.77							
1987/88		4.77							
1988/89									
			Cts/lb.						
Upland cotton									
1983/84	76.0	55.00		12.10	25.00	85	15.4	20/5/10-30	93/93/77
1984/85	81.0	55.00		18.60			15.6	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.8	20/10/0	82/0/0
1986/87 4/	81.0	55.00	8/44.00	26.00			15.5	25/0/0	93
1987/88	79.4	52.25	9/	17.3			15.3	25/0/0	92
1988/89	75.9	51.80		16.00			15.0	12.5/0/0	

1/ Percentage of base acres farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive Program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 3/ Percent of Program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The sorghum, oats and barley programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats, and in 1988 for oats. 7/ There are no target prices, acreage programs, or payment rates for soybeans. 8/ Loan repayment rate. 9/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: Larry Van Meir (202) 786-1840.

Table 23.—Fruit

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 P
Citrus 1/												
Production (thou ton)	15,242	14,255	13,328	16,484	15,105	12,057	13,608	10,792	10,488	11,074	11,952	12,641
Per capita consumption (lbs) 2/	117.2	124.5	107.4	108.5	112.7	104.7	108.6	120.2	102.8	115.7	109.8	NA
Non citrus 3/												
Production (thou tons)	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,916	15,333
Per capita consumption (lbs) 2/	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3	NA

	1987										1988	
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
F.O.B. shipping point prices												
Apples ($/carton) 4/	14.50	15.35	16.63	17.60	14.34	11.60	NA	7.83	7.83	8.98	7.75	11.50
Pears ($/box) 5/	14.75	14.10	15.28	21.00	NA	NA	NA	12.00	10.82	9.70	8.26	11.18
Oranges ($/box) 6/	4.68	5.15	5.62	6.47	6.29	6.18	6.01	7.36	10.23	5.45	6.19	6.24
Grapefruit ($/box) 6/	2.64	1.85	2.27	4.34	5.56	5.85	5.07	5.07	6.81	5.84	5.34	5.25
Stocks, ending												
Fresh apples (mil lbs)	1,174.5	751.9	386.3	203.8	74.9	4.2	2,687.1	5,390.2	4,697.2	3,311.6	3,158.8	2,417.4
Fresh pears (mil lbs)	92.1	53.7	21.1	1.7	11.8	195.2	507.1	425.8	338.8	279.4	198.4	148.4
Frozen fruits (mil lbs)	497.7	495.6	510.6	525.9	865.7	908.3	908.7	957.9	943.1	858.2	790.4	729.3
Frozen orange juice (mil lbs)	933.8	999.0	1,109.1	1,105.1	942.1	792.6	840.0	552.8	568.0	662.4	980.4	1,087.5

1/ Crop year beginning with year indicated. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar year. 4/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 5/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 80-135's. 6/ U.S. equivalent on-tree returns. P = preliminary. NA = not available.

Information contact: Ben Huang (202) 786-1885.

Table 24.—Vegetables

	Calendar years									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Production										
Total vegetables (1,000 cwt) 1/	382,165	413,925	381,370	378,123	431,515	403,320	457,392	453,769	445,436	462,402
Fresh (1,000 cwt) 1/ 2/	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,932	216,267	218,190
Processed (tons) 3/	9,980,100	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860	11,616,560	12,210,580
Mushrooms (1,000 lbs)	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA	NA
Potatoes (1,000 cwt)	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	361,511	385,774
Sweetpotatoes (1,000 cwt)	13,115	13,370	10,953	12,798	14,833	12,083	12,986	14,853	12,674	12,103
Dry edible beans (1,000 cwt)	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,886	26,309

	1987										1988	
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Shipments													
Fresh (1,000 cwt) 4/	18,066	22,286	20,011	23,887	35,745	23,791	17,075	20,213	16,104	15,445	18,954	17,690	18,523
Potatoes (1,000 cwt)	10,881	15,668	13,560	12,165	12,622	7,631	8,514	11,384	9,718	11,021	10,685	11,759	10,485
Sweetpotatoes (1,000 cwt)	259	293	299	177	98	34	136	322	359	795	516	281	274

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop; all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contacts: Shannon Hamm or Cathy Greene (202) 786-1884.

Table 25.—Other Commodities

	Annual					1986	1987			
	1983	1984	1985	1986	1987	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec
Sugar										
Production 1/	5,682	5,890	5,969	6,257	7,278	3,231	2,024	766	866	3,622
Deliveries 1/	8,812	8,454	8,035	7,786	8,172	1,991	1,908	2,002	2,146	2,116
Stocks, ending 1/	2,570	3,005	3,126	3,227	965	3,227	3,487	2,476	1,497	965
Coffee										
Composite green price N.Y. (cts/lb)	131.51	142.95	137.46	185.18	108.84	159.69	115.38	105.81	99.16	115.32
Imports, green bean equiv. (mil lbs) 2/	2,259	2,411	2,550	2,596	2,638	498	563	790	645	640

	Annual			1986	1987					
	1985	1986	1987 P	Dec	July	Aug	Sept	Oct	Nov	Dec
Tobacco										
Prices at auctions 3/										
Flue-cured ($/lb)	1.72	1.52	NA	NQ	NQ	1.47	1.65	1.66	1.42	NQ
Burley ($/lb)	1.59	1.57	NA	1.57	NQ	NQ	NQ	NQ	1.58	1.58
Domestic consumption 4/										
Cigarettes (bil)	594.0	584.0	577.0	48.8	37.9	49.8	51.0	48.6	52.6	48.5
Large cigars (mil)	3,226	3,090	2,757	261.6	193.0	220.2	253.7	250.7	213.6	217.3

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. P = preliminary. NA = not available. NQ = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1888; (coffee) Fred Gray (202) 786-1888; (tobacco) Verner Grise (202) 786-1890.

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 P	1987/88 F
				Million units			
Wheat							
Area (hectare)	238.7	237.7	229.1	231.4	229.3	228.1	219.3
Production (metric ton)	449.5	477.5	469.4	511.8	499.8	530.0	502.2
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	85.0	90.9	105.0
Consumption (metric ton) 2/	443.6	462.2	474.2	492.9	495.9	521.0	529.7
Ending stocks (metric ton) 3/	87.0	102.3	145.2	164.2	168.0	177.0	149.6
Coarse grains							
Area (hectare)	349.9	339.7	335.3	335.5	340.5	336.1	322.7
Production (metric ton)	766.0	784.4	687.2	814.4	841.8	833.9	786.9
Exports (metric ton) 1/	96.6	89.6	93.3	100.4	83.2	83.6	84.4
Consumption (metric ton) 2/	737.7	753.1	758.3	781.8	777.1	807.8	817.4
Ending stocks (metric ton) 3/	120.7	151.8	110.4	143.1	207.8	233.8	203.4
Rice, milled							
Area (hectare)	145.2	141.1	144.3	144.4	144.9	145.1	141.9
Production (metric ton)	280.6	285.7	308.0	319.2	319.1	317.8	303.9
Exports (metric ton) 4/	11.8	11.9	12.6	11.5	12.8	12.6	10.3
Consumption (metric ton) 2/	281.5	290.3	305.1	310.9	320.2	322.3	313.5
Ending stocks (metric ton) 3/	21.3	17.3	46.7	54.9	53.8	49.3	39.6
Total grains							
Area (hectare)	733.8	718.5	708.7	711.3	714.7	709.3	683.9
Production (metric ton)	1,496.1	1,547.6	1,464.6	1,645.4	1,660.7	1,681.7	1,593.0
Exports (metric ton) 1/	209.7	200.2	207.9	218.8	181.0	187.1	199.7
Consumption (metric ton) 2/	1,462.8	1,505.6	1,537.6	1,585.6	1,593.2	1,651.1	1,660.6
Ending stocks (metric ton) 3/	229.0	271.4	302.3	362.2	429.6	460.1	392.6
Oilseeds							
Crush (metric ton)	138.9	143.5	135.8	150.4	154.5	160.2	166.1
Production (metric ton)	169.4	178.2	165.0	191.0	195.9	194.2	203.8
Exports (metric ton)	35.9	35.2	33.0	33.0	34.4	37.5	39.3
Ending stocks (metric ton)	13.5	20.5	15.7	21.1	26.6	23.7	20.8
Meals							
Production (metric ton)	94.5	98.1	92.5	101.7	104.5	109.2	113.4
Exports (metric ton)	28.8	31.6	29.7	32.3	34.4	36.2	36.0
Oils							
Production (metric ton)	41.6	43.4	42.1	46.1	49.3	50.0	51.9
Exports (metric ton)	13.4	14.0	13.7	15.5	16.3	16.6	17.2
Cotton							
Area (hectare)	33.0	31.4	31.0	33.9	31.9	30.2	32.3
Production (bale)	71.2	68.1	67.7	88.1	79.6	70.5	79.2
Exports (bale)	20.2	19.4	19.2	20.5	20.5	26.1	24.0
Consumption (bale)	66.2	68.3	68.7	70.4	75.6	82.3	81.7
Ending stocks (bale)	25.2	25.1	25.1	41.5	46.3	33.8	31.1
	1982	1983	1984	1985	1986	1987 P	1988 F
Red meat							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.4	107.0
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.8	105.7
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
Poultry							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.3
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.8
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
Dairy							
Milk production (mil metric tons)	396.9	413.0	413.4	417.8	423.9	419.0	421.9

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1982 data correspond with 1981/82, etc. P = preliminary. F = forecast.

Information contacts: Frederic Surls (202) 786-1824; (red meat & poultry) Linda Bailey (202) 786-1286; (dairy) Sara Short (202) 786-1769.

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1987					1988	
	1985	1986	1987	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Export Commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu)	3.73	3.19	3.11	3.09	3.09	3.17	3.17	3.43	3.53	3.60
Corn, f.o.b. vessel, Gulf ports ($/bu)	2.89	2.27	1.95	1.74	1.89	2.02	2.10	2.13	2.22	2.24
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu)	2.64	2.16	1.88	1.75	1.78	1.89	2.01	1.98	2.06	2.13
Soybeans, f.o.b vessel, Gulf ports ($/bu)	5.83	5.45	5.55	5.08	5.53	5.55	5.88	6.16	6.45	6.46
Soybean oil, Decatur (cts/lb)	27.03	16.36	15.85	15.21	15.26	16.78	17.16	18.77	21.64	20.79
Soybean meal, Decatur ($/ton)	127.15	157.62	175.57	153.24	178.96	185.86	209.45	214.51	193.30	184.39
Cotton, 8 market avg. spot (cts/lb)	58.55	53.47	64.35	54.75	71.41	64.22	64.81	62.25	59.70	57.83
Tobacco, avg. price at auction (cts/lb)	172.05	153.93	146.50	141.34	152.15	152.84	152.38	152.61	150.08	149.27
Rice, f.o.b. mill, Houston ($/cwt)	18.49	14.60	13.15	10.50	11.75	19.44	21.00	21.00	21.00	24.50
Inedible tallow, Chicago (cts/lb)	14.33	9.03	13.79	11.00	15.53	15.23	15.17	15.56	18.00	17.08
Import Commodities										
Coffee, N.Y. spot ($/lb)	1.42	2.01	1.09	1.20	.97	1.05	1.19	1.19	1.19	1.28
Rubber, N.Y. spot (cts/lb)	41.91	42.87	50.65	46.51	54.17	53.76	53.10	54.01	54.59	53.75
Cocoa beans, N.Y. ($/lb)	.99	.88	.87	.85	.87	.84	.84	.82	.86	.78

Information Contact: Mary Teymourian (202) 786-1820.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1987									1988		
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
						March 1973=100						
Total U.S. trade 1/												
Nominal	97	96	98	99	99	97	97	92	90	91*	91*	90*
						April 1971=100						
Agricultural trade												
Nominal 2/	7,783	9,838	12,507	14,245	14,933	15,794	16,859	18,559	21,384	24,555	28,566	33,610
Real 3/	83	83	85	85	85	84	83*	81*	80*	80*	80*	78*
Soybeans												
Nominal 2/	358	374	394	412	428	444	460	491	600	596	606	612
Real 3/	69	69	70	71	71	69	69*	66*	65*	64*	64*	64*
Wheat												
Nominal 2/	44,815	57,302	73,477	83,997	88,101	93,144	99,717	109,724	126,159	145,327	169,807	200,627
Real 3/	103	104	106	106	104	103	102*	99*	97*	99*	104*	104*
Corn												
Nominal 2/	7,158	9,020	11,436	13,013	13,642	14,427	15,392	16,943	19,547	22,412	26,038	30,593
Real 3/	74	73	74	75	74	73	72*	69*	69*	69*	69*	68*
Cotton												
Nominal 2/	272	270	269	269	269	292	267	280	282*	282	281	279
Real 3/	89	87	87	88	87	86	86*	85*	83*	83*	82*	82*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. *Preliminary.

Information Contact: Edward Wilson (202) 786-1790.

Table 29.—Trade Balance

	Fiscal years*									Jan
	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1988
						$ million				
Exports										
Agricultural	40,481	43,780	39,097	34,769	38,027	31,201	26,309	27,859	32,000	2,877
Nonagricultural	169,846	185,423	176,308	159,373	170,014	178,236	176,628	202,331	NA	18,570
Total 1/	210,327	229,203	215,405	194,142	208,041	210,437	202,937	230,190	NA	21,447
Imports										
Agricultural	17,276	17,218	15,485	16,373	18,816	19,740	20,875	20,643	20,500	1,807
Nonagricultural	223,590	237,469	233,349	230,527	297,736	313,722	342,855	367,381	NA	31,311
Total 2/	240,866	254,687	248,834	246,900	316,652	333,462	363,730	388,024	NA	33,118
Trade balance										
Agricultural	23,205	26,562	23,612	18,396	19,111	11,461	5,434	7,216	11,500	1,070
Nonagricultural	-53,744	-52,046	-57,041	-71,154	-127,722	-134,486	-166,227	-165,050	NA	-12,741
Total	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,793	-157,834	NA	-11,671

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987.
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (Customs value).
F = forecast. NA = not available.

Information Contact: Steve MacDonald (202) 786-1827.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal years*				Jan	Fiscal years*				Jan
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	Thousand units					$ million				
Exports										
Animals, live (no) 1/	996	570	275	--	40	255	344	331	--	27
Meats & preps., excl. poultry (mt)	427	451	548	2/500	42	906	1,012	1,300	--	110
Dairy products (mt)	423	480	445	--	32	414	431	490	500	38
Poultry meats (mt)	234	265	376	400	31	257	282	406	--	31
Fats, oils, & greases (mt)	1,217	1,355	1,220	3/1,100	99	608	477	417	--	38
Hides & skins incl. furskins	--	--	--	--	--	1,325	1,440	1,666	--	157
Cattle hides, whole (no) 1/	25,456	25,586	24,337	--	1,772	1,019	1,131	1,254	--	106
Mink pelts (no) 1/	2,237	2,697	2,760	--	351	60	65	103	--	12
Grains & feeds (mt)	93,903	74,358	90,213	--	8,206	13,285	9,472	9,059	4/11,900	859
Wheat (mt)	28,523	25,501	28,204	37,500	3,807	4,264	3,260	2,877	5/4,400	369
Wheat flour (mt)	718	1,094	1,305	1,500	145	164	203	207	--	18
Rice (mt)	1,972	2,382	2,454	2,300	192	677	648	551	900	70
Feed grains, incl. products (mt)	55,362	36,236	47,605	52,300	4,102	6,884	3,817	3,752	4,600	354
Feeds & fodders (mt)	6,533	8,392	10,113	6/10,000	909	1,004	1,286	1,455	--	126
Other grain products (mt)	795	1,015	750	--	67	293	332	284	--	26
Fruits, nuts, and preps. (mt)	1,907	2,003	2,141	--	209	1,687	1,766	2,049	--	180
Fruit juices incl. froz. (hl) 1/	4,641	3,652	4,362	--	305	200	148	185	--	14
Vegetables & preps. (mt)	1,420	1,442	1,625	--	153	946	997	1,174	--	99
Tobacco, unmanufactured (mt)	257	224	224	200	33	1,586	1,318	1,204	1,200	182
Cotton, excl. linters (mt)	1,277	482	1,306	1,500	144	1,945	678	1,419	2,200	223
Seeds (mt)	289	269	305	--	36	352	367	371	400	58
Sugar, cane or beet (mt)	355	375	582	--	10	65	75	113	--	4
Oilseeds & products (mt)	23,803	27,583	29,653	--	2,792	6,195	6,271	6,293	7,400	656
Oilseeds (mt)	17,886	20,684	21,833	20,000	2,142	4,324	4,394	4,408	--	482
Soybeans (mt)	16,621	20,139	21,322	20,100	2,095	3,876	4,174	4,191	4,600	472
Protein meal (mt)	4,606	5,614	6,786	6,500	585	853	1,132	1,347	1,500	127
Vegetable oils (mt)	1,311	1,284	1,035	--	65	1,018	746	538	--	36
Essential oils (mt)	12	7	8	--	1	105	105	111	--	9
Other	443	568	564	--	51	1,069	1,126	1,271	--	92
Total	125,967	109,862	129,210	142,500	12,839	31,201	26,309	27,859	32,500	2,877
Imports										
Animals, live (no) 1/	2,120	1,885	1,994	--	398	569	637	610	600	121
Meats & preps., excl. poultry (mt)	1,123	1,139	1,282	--	132	2,214	2,248	2,797	--	275
Beef & veal (mt)	674	693	778	790	92	1,295	1,252	1,575	1,600	191
Pork (mt)	416	406	462	500	35	847	900	1,125	1,100	75
Dairy products (mt)	418	400	461	465	26	763	786	849	900	67
Poultry and products 1/	--	--	--	--	--	93	101	112	--	8
Fats, oils, & greases (mt)	21	22	21	--	2	18	17	18	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	--	240	200	304	--	13
Wool, unmanufactured (mt)	43	53	59	--	7	145	160	197	--	32
Grains & feeds (mt)	2,070	2,311	2,336	2,400	223	604	668	727	700	59
Fruits, nuts, & preps., excl. juices (mt)	4,483	4,637	4,835	4,800	427	1,891	1,976	2,178	--	192
Bananas & plantains (mt)	3,022	3,042	3,106	3,100	265	752	740	817	800	69
Fruit juices (hl) 1/	35,112	31,539	33,888	31,500	2,445	995	698	728	--	68
Vegetables & preps. (mt)	2,140	2,199	2,446	2,300	294	1,347	1,560	1,509	1,600	162
Tobacco, unmanufactured (mt)	191	208	224	175	15	556	606	634	500	46
Cotton, unmanufactured (mt)	31	41	38	--	2	17	14	7	--	7/
Seeds (mt)	92	89	133	100	12	91	111	156	100	13
Nursery stock & cut flowers 1/	--	--	--	--	--	318	353	369	--	32
Sugar, cane or beet (mt)	2,338	1,905	1,492	1,140	71	912	654	497	--	27
Oilseeds & products (mt)	1,271	1,508	1,572	1,500	145	784	639	579	700	64
Oilseeds (mt)	253	197	165	--	19	98	69	56	--	6
Protein meal (mt)	159	138	245	--	18	17	15	30	--	3
Vegetable oils (mt)	859	1,173	1,162	--	107	670	555	493	--	55
Beverages excl. fruit juices (hl)1/	15,494	15,488	15,549	--	1,043	1,622	1,848	1,923	--	130
Coffee, tea, cocoa, spices (mt)	1,868	1,940	1,915	--	140	4,983	6,099	4,867	--	336
Coffee, incl. products (mt)	1,128	1,223	1,207	1,200	75	3,244	4,400	3,232	3,000	186
Cocoa beans & products (mt)	539	507	503	525	49	1,285	1,189	1,088	1,100	109
Rubber & allied gums (mt)	799	801	824	840	84	680	615	714	800	91
Other	--	--	--	--	--	900	885	868	--	69
Total	--	--	--	--	--	18,740	20,875	20,643	20,500	1,807

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept 30, 1987. -- = not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1987 exports of categories used in the 1988 forecasts were 2/ 503 thousand mt. 3/ 1,204 thousand mt. 4/ 9,302 million. 5/ 3,086 million. 6/ Includes flour. 6/ 10,003 thousand mt. 7/ Less than 500,000. F = forecast

Information contact: Steve MacDonald (202) 786-1827.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal years*				Jan	Change from year* earlier				Jan
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	$ million					Percent				
Western Europe	7,183	6,848	7,203	7,600	752	-22	-5	5	5	5
European Community (EC-12)	6,668	6,432	6,771	7,100	707	-23	-4	5	5	4
Belgium-Luxembourg	470	361	423	--	0	-44	-23	17	--	-100
France	396	431	494	--	0	-22	9	15	--	-100
Germany, Fed. Rep.	900	1,001	1,266	--	149	-29	11	26	--	19
Italy	677	693	733	--	0	-12	2	6	--	-100
Netherlands	1,926	2,042	1,950	--	178	-14	6	-5	--	-8
United Kingdom	628	628	662	--	57	-20	0	5	--	10
Portugal	502	308	268	--	20	-28	-39	-13	--	-5
Spain, incl. Canary Islands	832	723	654	--	96	-32	-13	-10	--	33
Other Western Europe	515	415	432	500	45	-16	-19	4	16	29
Switzerland	232	128	145	--	0	-26	-45	13	--	-100
Eastern Europe	532	447	453	500	42	-28	-16	1	10	500
German Dem. Rep.	81	52	66	--	5	-39	-36	27	--	100
Poland	126	42	63	--	17	-36	-66	50	--	1,600
Yugoslavia	137	134	131	--	8	-24	-2	-2	--	300
Romania	88	112	115	--	2	-43	27	3	--	-33
USSR	2,525	1,105	659	1,700	226	1	-56	-40	158	100
Asia	11,933	10,494	11,989	14,300	1,242	-22	-12	14	19	42
West Asia (Mideast)	1,452	1,243	1,663	2,000	142	-22	-14	34	20	73
Turkey	129	111	117	--	5	-42	-13	5	--	150
Iraq	371	335	524	700	67	-12	-10	56	35	272
Israel	300	255	244	--	24	-15	-15	-4	--	-8
Saudia Arabia	381	335	489	500	29	-23	-12	46	2	107
South Asia	599	517	345	--	23	-31	-14	-33	--	77
Bangladesah	205	94	111	--	2	31	-54	18	--	100
India	129	90	93	--	7	-66	-30	3	--	40
Pakistan	228	285	98	300	4	-20	25	-66	206	300
China	239	83	235	500	26	-65	-65	183	113	-28
Japan	5,663	5,139	5,553	6,200	591	-18	-9	8	12	29
Southeast Asia	842	724	707	--	93	-31	-14	-2	--	111
Indonesia	204	172	152	--	22	-53	-16	-12	--	175
Philippines	285	269	259	300	19	-5	-6	-4	16	19
Other East Asia	3,138	2,788	3,485	4,100	367	-14	-11	25	18	51
Taiwan	1,342	1,109	1,354	1,600	148	-5	-17	22	18	70
Korea, Rep.	1,400	1,277	1,693	2,000	185	-23	-9	33	18	49
Hong Kong	396	400	436	500	34	-3	1	8	15	6
Africa	2,527	2,134	1,784	2,200	172	-12	-16	-16	23	16
North Africa	1,207	1,401	1,279	1,600	134	-22	16	-9	25	1
Morocco	156	159	196	--	19	-54	2	23	--	25
Algeria	220	329	244	500	27	36	50	-26	105	42
Egypt	766	875	761	800	81	-13	14	-13	18	-16
Sub-Sahara	1,320	733	505	600	38	-1	-44	-31	19	148
Nigeria	367	158	67	--	3	6	-57	-58	--	132
Rep. S. Africa	189	70	48	--	8	-64	-63	-30	--	243
Latin America & Caribbean	4,570	3,598	3,765	4,000	257	-13	-21	5	6	4
Brazil	557	445	418	400	17	27	-20	-6	-4	-41
Caribbean Islands	771	752	829	--	67	-7	-2	10	--	-13
Central America	361	334	377	--	20	-9	-7	13	--	24
Colombia	238	137	115	--	9	8	-42	-16	--	169
Mexico	1,566	1,114	1,215	1,300	68	-20	-28	9	7	-7
Peru	106	108	140	--	20	-53	2	30	--	116
Venezuela	721	493	459	600	40	-7	-32	-7	31	62
Canada	1,727	1,466	1,776	2,000	165	-11	-15	21	12	8
Oceania	204	216	230	200	19	-6	6	6	-13	-12
Total	31,201	26,309	27,859	32,500	2,877	-18	-16	6	15	33
Developed countries	15,225	13,954	15,014	16,300	1,557	-21	-8	8	10	13
Less developed countries	12,680	10,719	11,498	13,500	1,025	-15	-15	7	15	37
Centrally planned countries	3,296	1,636	1,347	2,700	295	-16	-50	-18	101	586

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987. F = forecast.
Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1827.

Table 32.—Farm Income Statistics

	Calendar years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	$ billion										
1. Farm receipts	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	138	140 to 144
Crops (incl. net CCC loans)	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	59	64 to 67
Livestock	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	74	71 to 74
Farm related 1/	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5	4 to 6
2. Direct Government payments	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	17	13 to 15
Cash payments	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	9	6 to 8
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	8	7 to 9
3. Total gross farm income (4+5+6) 2/	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	163	163 to 167
4. Gross cash income (1+2)	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	156	155 to 159
5. Nonmoney income 3/	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	10	7 to 9
6. Value of inventory change	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-2	0 to 1
7. Cash expenses 4/	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	99	100 to 104
8. Total expenses	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	119	120 to 124
9. Net cash income (4-7)	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	57	50 to 55
10. Net farm income (3-8)	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	45	40 to 45
Deflated (1982$)	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	38	34 to 38
11. Off-farm income	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	48	48 to 50
12. Loan changes 5/: Real estate	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7.3	-6	-3 to -7
13. 5/: Nonreal estate	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-10.5	-9	-2 to -6
14. Rental income plus monetary change	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	7	7 to 9
15. Capital expenditures 5/	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.6	7	7 to 9
16. Net cash flow (9+12+13+14-15)	35.1	43.7	37.5	37.9	38.4	33.6	33.6	31.6	33.4	43	40 to 45

1/ Income from machine hire, custom work, sales of forest products, and other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years 1/										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	$ billion										
Assets											
Real estate	601.9	706.2	782.9	784.7	748.8	739.6	639.6	558.9	510.1	530	530 to 540
Non-real estate	175.3	201.6	213.2	212.0	212.2	205.4	208.9	191.2	181.5	181	174 to 179
Livestock & poultry	51.3	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	49	47 to 50
Machinery & motor vehicles	75.5	85.8	93.1	101.4	102.0	100.8	96.8	87.7	80.4	77	71 to 75
Crops stored 2/	25.3	29.2	33.0	29.1	27.7	23.7	29.6	23.1	18.4	19	17 to 21
Financial assets	23.1	25.3	26.5	28.0	29.5	31.3	32.8	34.2	35.0	36	35 to 39
Total farm assets	777.2	907.8	996.1	996.7	961.0	945.0	848.5	750.1	691.6	712	705 to 720
Liabilities											
Real estate 3/	66.7	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.1	83	75 to 81
Non-real estate 4/	60.7	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	58	53 to 57
Total farm liabilities	127.4	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.0	141	131 to 136
Total farm equity	649.7	756.2	828.3	814.4	771.5	752.3	657.7	574.9	536.6	571	580 to 590
	Percent										
Selected ratios											
Debt-to-assets	16.4	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.4	20	17 to 20
Debt-to-equity	19.6	20.0	20.1	22.4	24.6	25.6	29.0	30.5	28.9	25	20 to 24
Debt-to-net cash income	385	454	488	556	497	519	492	370	289	240	230 to 240

1/ As of December 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts from Farm Marketings, by State

Region / State	Livestock & Products				Crops 1/				Total 1/			
	1986	1987	Dec 1987	Jan 1988	1986	1987	Dec 1987	Jan 1988	1986	1987	Dec 1987	Jan 1988
	$ million 2/											
North Atlantic												
Maine	223	228	19	21	143	168	12	14	365	387	32	35
New Hampshire	72	72	6	6	38	38	4	3	109	109	10	9
Vermont	361	359	30	32	36	35	5	2	398	394	35	33
Massachusetts	131	131	11	11	292	266	27	10	423	396	38	21
Rhode Island	12	12	1	1	63	63	9	3	75	75	10	4
Connecticut	210	195	15	15	162	160	10	26	372	355	25	41
New York	1,809	1,765	149	160	724	720	64	40	2,533	2,484	213	200
New Jersey	150	150	13	12	430	419	24	18	580	569	37	30
Pennsylvania	2,239	2,258	177	201	926	934	81	91	3,165	3,192	259	292
North Central												
Ohio	1,566	1,647	131	128	2,043	1,802	128	162	3,610	3,449	259	291
Indiana	1,852	1,858	143	132	2,258	2,003	127	182	4,110	3,861	270	314
Illinois	2,143	2,306	161	183	4,737	3,903	310	467	6,880	6,209	471	650
Michigan	1,236	1,256	104	116	1,429	1,274	134	114	2,664	2,531	238	230
Wisconsin	4,164	4,360	353	388	892	837	86	55	5,057	5,197	440	444
Minnesota	3,395	3,551	273	289	2,680	2,150	277	341	6,074	5,701	550	631
Iowa	4,982	5,606	494	488	4,124	3,497	315	575	9,106	9,104	808	1,063
Missouri	1,930	2,074	188	189	1,586	1,476	175	200	3,516	3,550	364	389
North Dakota	676	795	91	83	1,623	1,539	160	104	2,299	2,334	251	186
South Dakota	1,525	1,815	151	191	938	812	55	49	2,463	2,627	206	240
Nebraska	4,260	4,907	402	512	2,669	1,984	246	438	6,928	6,891	648	950
Kansas	3,447	3,721	256	351	1,978	1,809	184	219	5,425	5,530	440	570
Southern												
Delaware	402	350	25	31	118	103	6	4	520	453	31	35
Maryland	814	720	56	64	371	346	22	19	1,186	1,066	78	83
Virginia	1,127	1,123	90	90	486	470	42	26	1,613	1,593	131	116
West Virginia	156	157	12	12	71	57	5	4	227	214	18	16
North Carolina	2,174	1,978	151	138	1,608	1,584	137	55	3,782	3562	288	194
South Carolina	455	442	34	37	440	483	46	28	894	925	81	65
Georgia	1,882	1,716	124	152	1,324	1,255	84	59	3,206	2,971	208	210
Florida	1,000	1,058	85	89	3,688	4,052	330	533	4,688	5,110	415	622
Kentucky	1,311	1,419	82	116	1,079	898	297	168	2,389	2,317	379	285
Tennessee	1,033	1,166	84	99	891	878	161	78	1,924	2,044	245	177
Alabama	1,431	1,359	94	110	578	585	58	48	2,009	1,944	152	157
Mississippi	1,044	999	73	85	741	907	145	124	1,785	1,906	218	208
Arkansas	2,017	1,878	129	145	1,005	1,024	154	135	3,022	2,802	283	280
Louisiana	503	550	40	45	869	898	161	113	1,372	1,448	202	158
Oklahoma	1,875	1,934	131	206	746	698	84	75	2,622	2,631	215	281
Texas	5,516	6,116	417	505	2,928	3,104	337	387	8,444	9,220	755	892
Western												
Montana	720	873	100	114	493	582	73	54	1,213	1,456	174	169
Idaho	884	977	88	121	1,042	1,126	115	59	1,925	2,103	203	180
Wyoming	455	542	37	40	111	114	18	6	566	656	55	46
Colorado	2,218	2,447	216	167	890	861	106	77	3,108	3,308	322	245
New Mexico	708	803	62	68	302	308	29	20	1,010	1,111	92	88
Arizona	699	787	45	53	796	938	101	216	1,495	1,725	146	268
Utah	437	471	36	41	134	125	10	13	570	596	46	55
Nevada	160	160	11	14	72	75	7	6	232	235	17	19
Washington	981	1,017	86	106	1,812	1,823	113	110	2,793	2,840	199	216
Oregon	649	734	75	64	1,135	1,181	78	72	1,784	1,915	154	137
California	4,446	4,548	397	349	9,602	10,183	936	955	14,049	14,731	1,333	1,304
Alaska	10	10	1	1	19	21	3	1	29	31	3	2
Hawaii	84	84	7	7	491	488	41	41	575	572	48	48
United States	71,573	75,483	5,959	6,579	63,612	61,057	6,134	6,599	135,185	136,540	12,093	13,178

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.
2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1987					1988
	1982	1983	1984	1985	1986	1987	Jan	Sept	Oct	Nov	Dec	Jan
	$ million											
Farm marketings & CCC loans *	142,594	136,580	142,314	144,193	135,185	136,540	12,644	12,273	15,451	15,420	12,093	13,178
Livestock & products	70,257	69,437	72,936	69,780	71,573	75,483	6,172	6,632	7,198	6,696	5,959	6,579
Meat animals	40,917	38,893	40,832	38,589	39,137	44,867	3,534	4,084	4,607	4,004	3,496	4,009
Dairy products	18,234	18,763	17,944	18,063	17,824	17,806	1,550	1,423	1,501	1,465	1,499	1,570
Poultry & eggs	9,520	9,979	12,192	11,191	12,678	10,871	944	948	964	967	839	841
Other	1,586	1,801	1,968	1,937	1,934	1,939	143	177	126	260	125	159
Crops	72,338	67,143	69,378	74,413	63,612	61,057	6,472	5,642	8,253	8,724	6,134	6,599
Food grains	11,412	9,713	9,576	8,080	5,948	5,401	348	716	613	348	424	421
Feed crops	17,409	15,535	15,831	22,479	17,849	13,085	2,459	829	1,775	2,686	1,334	1,619
Cotton (lint and seed)	4,457	3,705	3,270	3,730	2,920	3,945	364	366	801	782	667	720
Tobacco	3,342	2,768	2,841	2,722	1,918	1,833	172	548	208	159	386	204
Oil-bearing crops	13,817	13,546	13,894	12,595	10,507	10,769	1,298	690	2,352	2,011	1,115	1,486
Vegetables & melons	8,063	8,462	9,142	8,558	8,705	9,207	760	900	862	428	415	1,012
Fruits & tree nuts	6,846	6,064	6,768	6,836	6,900	7,806	496	833	872	998	763	484
Other	6,993	7,352	8,057	8,413	8,865	9,011	575	759	771	1,303	1,030	653
Government payments	3,492	9,295	8,430	7,704	11,813	16,747	1,301	345	4,186	300	1,417	17
Total	146,086	145,875	150,744	151,897	146,998	153,287	13,945	12,618	19,637	15,720	13,510	13,195

* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information Contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1988 F
	$ million									
Feed	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179	15,600	16,000 to 18,000
Livestock	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609	11,600	10,000 to 12,000
Seed	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984	2,600	2,200 to 3,200
Farm-origin inputs	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772	29,800	29,000 to 33,000
Fertilizer	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787	5,400	5,500 to 6,500
Fuels & oils	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,500	4,200 to 5,200
Electricity	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121	2,200	2,000 to 3,000
Pesticides	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331	4,000	3,600 to 4,600
Manufactured inputs	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029	16,100	16,000 to 19,000
Short-term interest	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795	6,500	5,500 to 6,500
Real estate interest 1/	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,000	7,500 to 8,500
Total interest charges	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926	14,500	13,000 to 15,000
Repair & operation 1/ 2/	6,754	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,600	6,500 to 7,500
Hired labor	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875	10,300	10,000 to 12,000
Machine hire & custom work	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791	1,700	1,200 to 2,200
Marketing, storage, & transportation	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,500	3,500 to 4,500
Misc. operating expenses 1/	6,771	6,881	6,909	7,262	8,439	8,450	7,942	7,344	7,800	7,000 to 8,000
Other operating expenses	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519	29,900	29,000 to 34,000
Capital consumption 1/	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997	17,500	16,000 to 17,000
Taxes 1/	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,200	3,700 to 4,700
Net rent to non-operator landlord	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684	7,400	7,300 to 8,300
Other overhead expenses	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806	29,100	27,000 to 30,000
Total production expenses	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052	119,400	120,000 to 124,000

1/ Includes operator dwellings 2/ Beginning in 1982, miscellaneous operating expenses includes other livestock purchases and dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Richard Kodl (202) 786-1808; Chris McGath (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity & Function

	Fiscal years										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 E	1989 E
	$ million										
Commodity/Program											
Feed grains	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,967	12,568	11,050
Wheat	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,836	1,083	1,524
Rice	49	-76	24	164	664	333	990	947	906	189	320
Upland cotton	141	64	336	1,190	1,363	244	1,553	2,142	1,786	42	229
Tobacco	157	-88	-51	103	880	346	455	253	-346	-433	-323
Dairy	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,166	1,227	936
Soybeans	4	116	87	169	288	-585	711	1,597	-476	-1,069	-305
Peanuts	27	28	28	12	-6	1	12	32	8	3	1
Sugar	313	-405	-121	-5	49	10	184	214	-65	-14	--
Honey	-2	9	8	27	48	90	81	89	73	70	56
Wool	39	35	42	54	94	132	109	123	152	125	127
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	656	-113	1,340	-225	-1,542	1,295	-314	486	371	2,013	1,234
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140
Function											
Price support loans	2	-66	174	7,015	8,438	-27	6,272	13,628	12,199	8,222	5,514
Direct payments	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	5,862	3,983	6,023
Purchases	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	-633	399
Producer storage payments	247	254	32	679	964	268	329	485	832	565	522
Processing, storage, & transportation	128	259	323	355	665	639	657	1,013	1,659	1,494	1,058
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	662	200	1,436	-265	-1,607	679	-648	329	305	2,173	1,333
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140

E = estimated in the fiscal 1989 President's Budget. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148.

Transportation

Table 38.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1987					1988	
	1985	1986	1987 P	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Rail freight rate index 1/ (Dec 1984=100)										
All products	100.0	100.7	100.1	99.8	100.1	100.2	100.2 P	100.3 P	103.3 P	103.3 P
Farm products	99.0	99.6	99.3	98.9	99.5	99.8	99.8 P	99.4 P	101.9 P	102.0 P
Grain	98.3	98.9	98.7	98.3	98.9	99.2	99.3 P	98.5 P	101.2 P	101.2 P
Food products	100.1	99.9	98.6	98.4	98.6	98.6	98.7 P	98.7 P	102.4 P	102.4 P
Grain										
Rail carloadings (thou cars) 2/	22.9	24.4	29.1	26.7	32.2 P	33.9 P	30.8 P	29.0 P	30.8 P	33.2 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	602	629	575	525	530 P	427 P	495 P	478 P	428 P	473 P
Rail (thou cwt) 3/ 4/	532	563	653	664	612 P	631 P	716 P	742 P	785 P	613 P
Truck (thou cwt) 3/ 4/	8,298	8,031	9,163	8,522	8,341 P	8,497 P	8,605 P	8,383 P	8,980 P	8,766 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	116.1	113.1	116.3	115.0	117.1	117.9	117.8	118.5	118.1	118.3
Fleet operation (cts/mile)	116.7	113.6	116.5	115.2	117.0	117.8	118.1	118.3	118.0	118.1

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1987 and 1988. 5/ Office of Transportation, USDA. P = Preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

Table 39.—Indexes of Farm Production Input Use & Productivity

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 2/
					1977=100					
Farm output	104	111	104	118	116	96	112	118	111	109
All livestock products 3/	101	104	108	109	107	109	107	110	110	111
Meat animals	100	103	107	106	101	104	101	102	100	98
Dairy products	99	101	105	108	110	114	110	117	117	116
Poultry & eggs	106	114	115	118	119	120	123	128	133	143
All crops 4/	102	113	101	117	117	88	111	118	109	106
Feed grains	108	116	97	121	122	67	116	134	123	105
Hay & forage	106	108	98	106	109	100	107	106	106	102
Food grains	93	108	121	144	138	117	129	121	107	106
Sugar crops	101	94	97	107	96	93	95	97	106	112
Cotton	76	102	79	109	85	55	91	94	69	102
Tobacco	105	80	93	108	104	75	90	81	63	64
Oil crops	105	129	99	114	121	91	106	117	110	106
Cropland used for crops	97	100	101	102	101	88	99	98	94	87
Crop production per acre	105	113	100	115	116	100	112	120	116	122
Farm input 5/	102	105	103	102	99	97	95	92	87	NA
Farm real estate	100	103	103	104	102	101	97	95	93	NA
Mechanical power & machinery	104	104	101	98	92	89	85	81	76	NA
Agricultural chemicals	107	123	123	129	118	105	121	121	109	NA
Feed, seed & livestock purchases	108	115	114	108	107	109	105	105	102	NA
Farm output per unit of input	101	105	101	116	118	99	118	128	127	NA
Output per hour of labor										
Farm 6/	104	113	109	123	125	99	121	139	139	NA
Nonfarm 7/	101	99	99	100	99	102	105	106	108	NA

1/ For historical data and indexes, see Economic Indicators of the Farm Sector: Production and Efficiency Statistics, 1985, ECIFS 5-5 2/ Preliminary indexes for 1987 based on January 1988 Crop Production: 1987 Summary report and other releases of the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. NA = not available.

Information contact: Jim Hauver (202) 786-1459.

Table 40.—Per Capita Food Consumption Indexes (1967 = 100)

	1978	1979	1980	1981	1982	1983	1984	1985	1986 2/
					Pounds				
Meats									
Beef	87.2	78.0	76.4	77.1	76.8	78.2	78.1	78.8	78.4
Veal	2.4	1.7	1.5	1.6	1.6	1.6	1.8	1.8	1.9
Lamb and mutton	1.4	1.3	1.4	1.4	1.5	1.5	1.5	1.4	1.4
Pork	55.8	63.4	68.0	64.9	58.5	61.9	61.5	62.0	58.6
Fish (edible weight)									
Canned	5.0	4.8	4.5	4.8	4.3	4.8	4.9	5.1	5.4
Fresh and frozen	8.1	7.8	8.0	7.8	7.7	8.0	8.5	9.0	9.0
Cured	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Poultry products									
Eggs	34.5	35.1	34.4	33.5	33.5	33.0	32.9	32.2	31.7
Chicken (ready-to-cook)	46.4	50.3	49.8	51.3	52.7	53.4	55.2	57.6	58.8
Turkey (ready-to-cook)	9.1	9.9	10.5	10.7	10.8	11.2	11.3	12.1	13.3
Dairy products									
Cheese (excluding cottage)	16.8	17.2	17.5	18.2	19.9	20.5	21.4	22.5	23.0
Fluid whole milk 3/	161.7	153.6	147.0	139.6	134.1	130.8	126.5	122.8	115.8
Fluid lowfat milk 4/	85.1	88.0	91.2	92.9	93.1	95.9	99.1	104.6	110.4
Fluid cream 5/	3.3	3.3	3.4	3.4	3.5	3.6	4.0	4.3	4.8
Ice cream (product weight)	17.6	17.3	17.5	17.4	17.6	18.0	18.1	18.1	18.3
Specialty products 6/									
Fats and oils (fat content only) 7/	54.7	56.4	57.2	57.4	58.0	59.9	58.7	64.2	64.1
Butter (product weight)	4.4	4.5	4.5	4.2	4.3	4.9	4.9	4.9	4.6
Margarine (product weight)	11.3	11.2	11.3	11.1	11.0	10.4	10.4	10.8	11.4
Lard	2.2	2.5	2.6	2.5	2.5	2.1	2.1	1.8	1.7
Shortening	17.8	18.4	18.2	18.5	18.6	18.5	21.2	22.8	22.0
Salad and cooking oils	20.1	20.8	21.2	21.8	21.8	23.5	19.8	23.5	24.1
Fruits									
Fresh									
Citrus	25.7	23.9	27.9	24.2	23.9	28.3	23.2	22.6	25.1
Noncitrus	54.6	57.0	58.4	59.0	59.8	60.0	64.6	63.7	66.9
Processed									
Canned fruit 8/	10.9	10.9	10.7	10.0	9.7	9.2	8.9	8.4	8.4
Frozen fruit	3.3	2.7	3.1	2.9	2.9	2.9	3.0	3.3	3.5
Frozen citrus juices 9/	30.3	32.9	33.9	33.2	36.9	41.6	35.6	44.0	43.2
Chilled citrus juices 9/	6.0	5.4	5.8	4.1	3.5	4.1	3.6	3.2	3.7
Canned citrus juices 9/	5.5	5.5	5.1	4.8	3.9	3.0	2.8	2.3	2.1
Dried fruit 10/	1.9	2.3	2.2	2.4	2.7	2.8	2.9	2.9	3.0
Vegetables									
Fresh 11/	68.7	71.1	72.6	71.4	74.0	74.3	78.5	78.5	79.4
Fresh potatoes	49.2	46.3	46.7	41.8	47.1	47.6	43.1	45.7	49.9
Frozen potato products	21.0	20.1	18.2	18.8	20.0	19.5	20.8	22.6	22.6
Dry edible beans 12/	4.7	6.4	5.4	5.4	6.6	6.6	5.8	6.5	6.0
Grains									
Wheat flour 13/	115.2	117.2	116.8	115.8	116.7	117.4	118.1	123.3	129.6
Rice	5.7	8.4	9.4	11.0	11.8	9.7	8.6	9.1	11.6
Pasta	10.3	10.2	10.0	10.0	9.9	10.5	11.3	12.9	14.3
Other									
Coffee	7.9	8.5	7.7	7.7	7.6	7.6	7.5	7.5	7.4
Cocoa	2.6	2.6	2.7	2.8	3.0	3.1	3.5	3.4	3.4
Peanuts (shelled)	5.9	5.9	4.8	5.5	5.9	5.9	6.0	6.3	6.4
Sugar (refined)	91.4	89.3	83.6	79.4	73.6	71.1	67.4	63.0	60.2
Corn sweeteners 14/	33.7	36.3	40.2	44.5	48.1	52.1	57.8	66.6	67.3
Soft drinks (gals)	26.6	27.0	27.1	27.1	26.9	26.9	27.2	29.1	30.3

1/ Quantity in pounds, retail weight unless otherwise stated. Data on calendar year basis except for dried fruits, fresh citrus fruits, peanuts, and rice which are on a crop-year basis. 2/ Preliminary. 3/ Plain and flavored. 4/ Lowfat, skim, buttermilk, and flavored drinks. 5/ Heavy cream, light cream, and half and half. 6/ Yogurt, sour cream, and eggnog. 7/ Includes 80 percent of the product weight of butter and margarine and all of the product weight of other fats and oils, some of which are not shown separately. 8/ Excludes apple, applesauce, cranberries, pineapple, and citrus sections. 9/ Single-strength basis. 10/ Excludes apples, apricots, peaches, and pears. 11/ Includes asparagus, broccoli, carrots, cauliflower, celery, corn, lettuce, onions, and tomatoes. 12/ Cleaned basis. 13/ White, whole wheat, semolina, and durum flour. 14/ High fructose, glucose, and dextrose; dry-weight equivalent.

Information contact: Judy Putnam (202) 786-1870.

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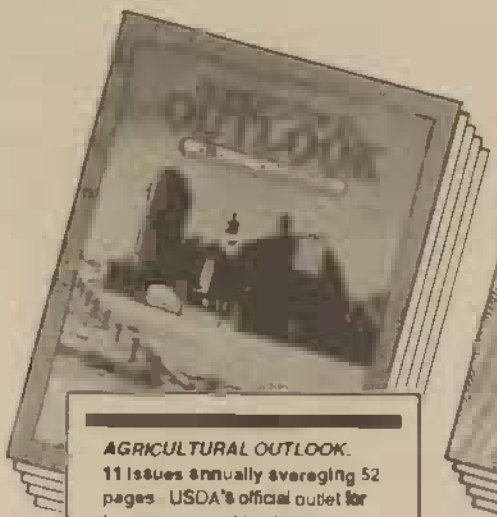

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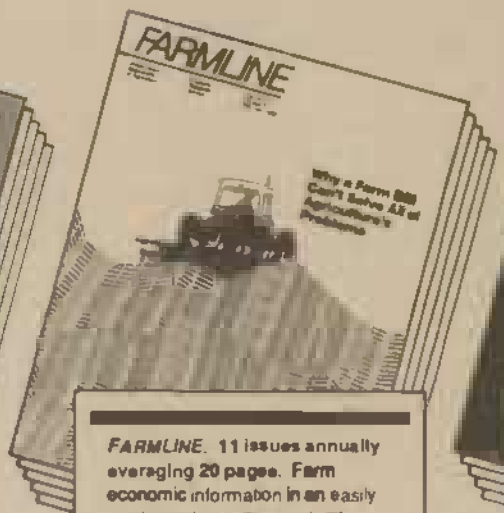

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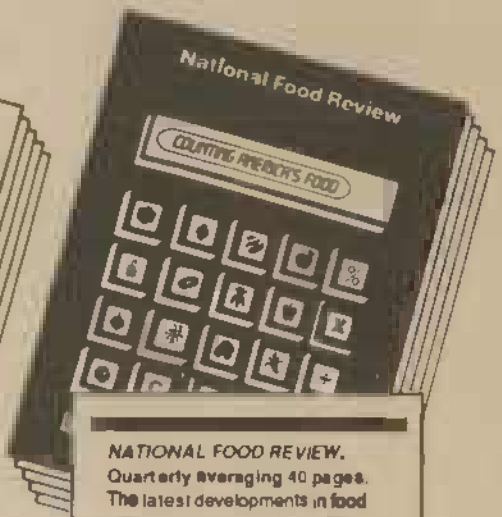

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